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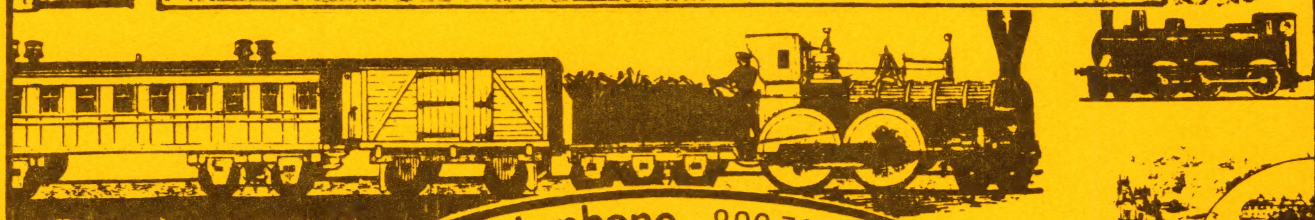
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STOP PRESS

As this issue goes to print, we received news that our Managing Editor, Gordon Duncan, has suffered a heart attack and is in hospital.

On behalf of all members of A.M.R.A., Journal wishes Gordon a speedy and full recovery.

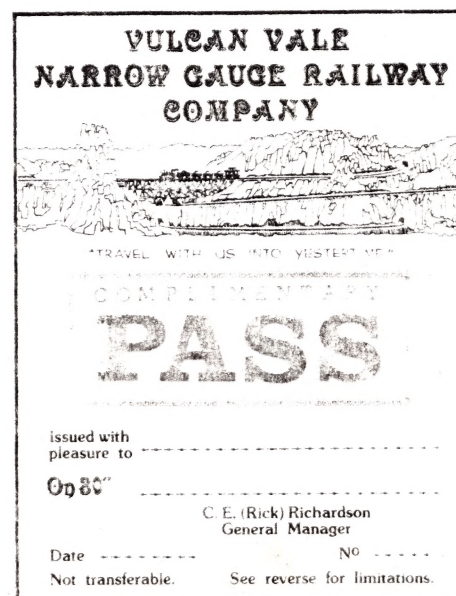
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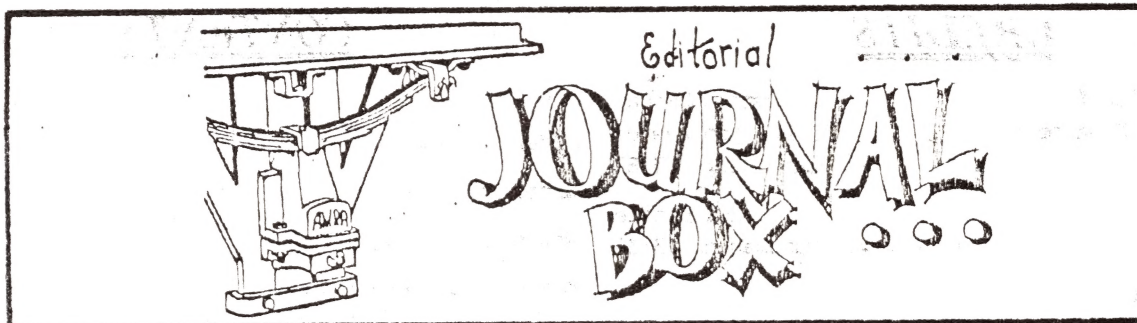
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ON THE COVER

The Roller Trinkle Mill on Rick Richardson's Vulcan Vale Narrow Gauge (On30) Railway. Constructed by Rick and Grant Richardson, this model won the Open Modelling Competition Cup at the AMRA (Victorian Branch) Model Railway Exhibition, 1982.

Photograph by Roger Lloyd





Standardisation seems to be a common catchcry in many magazines that I have read over the last year or so - not only in model railways. Yet, in our hobby, there are numerous standards used throughout the world. Each country - and seemingly each company - has its own standards.

Many years ago, several well known modellers combined to produce a set of standards combining and refining elements from American, British and European model railway standards, and called them the AMRA Standards.

It seems that these either did not go far enough, or were not publicised enough, or just were not accepted generally by the modelling fraternity who are not members of our Association. One only has to thumb through the various modelling magazines of today to find someone suggesting more, new or varied standards from those already in existence - and also putting forward very good reasons why each should be adopted.

Recent moves in an AMRM magazine to try and 'standardise the standards' are to be commended. However, reading the list in the September/October Journal, I count 81 different scales and gauges. If we even pull out 10% of them that, in our experience, do not seem to be used in this country, then we stand the chance of upsetting someone because his favourite scale or gauge is not included.

If I remember correctly, the various gauges used on Australian Railways include - 2', 2'6", 3'6", 4'8½" and 5'3". Just to produce standards

to cover these five gauges, and the commonly used scales that go with them is a mammoth task in itself. To whoever takes on the task, I wish them the best of luck.

Perhaps what I am trying to say is that, although standards are necessary to ensure uniformity, the use of accepted standards is still a matter of choice. I do not want to be the one to say that because I model in 16.5 mm gauge and 3.5 mm scale, you should not model in Sn3½, or EM, or O, or N, or whichever scale or gauge you choose, do you??

I believe that here we have the classic chicken and egg situation - where do we start, and with what? Do we only cover scales and gauges that can be used to model Australian, and leave those who model English, or American, or Continental, railways to use the current standards for those countries? Do we use track gauge as a starting point, or do we select a scale or scales and develop track gauges to suit?

Rather a vexing set of questions, to which I do not really have an answer, although I tend to favour starting with 32 mm, 16.5 mm, 12 mm and 9 mm track gauges, and then using scales that will allow modelling the five Australian gauges I have previously mentioned. But then I am slightly biased towards modelling Australian.

Rex Little
Editor

THE FEDERAL SCENE

FROM THE PRESIDENT —

Fifteen years have now passed since the Federal COM moved to New South Wales, and during this period each successive committee has done everything possible to make membership of AMRA attractive. Due to a restricted budget owing to rising costs, the outgoing committee were not able to achieve all the goals aimed for, and I hasten to assure all members that despite being classified as 'HEADLESS CHOOKS' by one particular member, every effort has been made to ensure that the Association has been conducted in a business-like manner, and it is to be hoped that in the coming 12 months AMRA will be able to offer members even more.

When the Victorian Branch took over the printing of Journal, certain critics derided the efforts of the Victorian Amateurs. It is pleasing to note that their efforts are being rewarded as each

issue is showing a marked improvement, as well as reduced cost of printing, and, hopefully, this will continue. It is proposed that from January/February 1984, to produce the Journal in A4 size, to make alterations to the present format, and to include all decisions made by the COM in Secretary's Desk for the information of all members.

The Federal COM has received correspondence requesting that the Journal and all responsibility and decisions regarding same be handed over to a certain member whereby the COM and members would have no way of controlling the content, etc. As the Journal is a Federal publication, it would require a referendum of members before this could be done. The COM has been accused of censorship as to the type of letter printed in 'Pop Valve'. This was only done following complaints from members

in various States, and only letters having a direct bearing on the hobby will be published. The Managing Editor and his committee are to be congratulated on their efforts in getting Journal back on time; however, I will repeat again, that the contents are dependent on members' support. All articles received will be published as soon as possible after receipt or else held for a short period to provide a balanced issue.

Unfortunately, our membership, as at 31 July 1983, showed a drop of 31 over the previous year. The two States showing a drop in members being New South Wales and Victoria. Investigation has shown the current economic situation in these States was a major cause of loss of members. The current membership renewal rate has shown a downturn, possibly due to our new method of including membership renewal notices in Journal.

As reported in the annual balance sheet, our financial position has improved, despite increasing costs. The COM has and will continue to ensure that expenditure is kept to a minimum.

It is with some concern that there seems to be a lack of interest by members to take office in their State Branch Committees, but is pleasing

that the Federal COM will be of full strength for the ensuing year, sufficient nominations being received. The question has been raised why it is necessary for the Federal COM to be composed of members from one state, instead of having members from each state when all business could be conducted per electronic medium. The costs involved in the latter would be more than the current membership fees could absorb and would be viewed by the majority of members as a complete waste of funds.

Hopefully, in the foreseeable future, sufficient members in either Queensland or Western Australia may see their way clear to nominate and takeover the Federal COM. Geographic location is of no importance as we are all part of the one Association.

I would like to take this opportunity to thank Norm Read, Ken Edwards and Darryl Musgrove for giving every effort to their allotted tasks, and to the Committee as a whole for their unswerving loyalty and support.

Keith J Wilcox

THE SECRETARY'S DESK —

Two new faces to grace the COM meetings in 1984 - Phil Kelly and Frank Peck, both long time members of the Association. Phil has served as State Secretary and has been Auctioneer for some few years and both were welcomed to the Committee by the President at the 33rd AGM on 11/11/83, and the new COM is as follows:

President	Keith Wilcox
Vice President	Phil Kelly
Secretary	Norm Read
Treasurer	Ken Edwards
Registrar	Darryl Musgrove
Committeemen	Frank Peck
	Col Steele

The 'Membership Thermometer' shows membership renewals to 11 November 1983, and we hope the drop is only due to the economy - or thoughtlessness! We do know of quite a few who were fed up with the bickering in 'Pop Valve' lately, but we hope that period is behind us.

The COM at the last meeting moved that the section of Article 29 (c) of the Constitution relating to separate costing of Journal in relation to subscriptions be deleted, as Australia Post no longer require this. Also moved that as from January/February 1984 issue, Journal to be A4 size and side stapled. This will facilitate the removal of any Information Sheets for separate filing.

Also that the COM prefer that articles take

precedence over Pop Valve and State News in Journal. With regard to State News, as the Victorian Branch do not produce a 'Newsletter', their news is fresh to all members, likewise, the Queensland Branch provide separate news to that which appears in their 'Greenboard'. Now that Journal is being printed regularly, may be the other States could adopt the Queensland idea.

It was also moved that the nominations of P Kehoe and B E Thoday to the COM be not accepted, as it was considered that the costs of a necessary electronic hook-up of COM meetings was not warranted.

At the AGM, Bob Wardrop, NSW Branch President, mentioned that, at the recent Sydney Exhibition, three State Presidents and a State Representative were able to meet over a cup of tea and have a discussion.

There is no doubt that face to face discussions can settle many problems or thrash out new ideas more or less on the spot, but with our present resources, that is just a dream, unless, of course, all Presidents work for airlines.

A motion was also carried that in future all resolutions adopted at COM meetings be included in the Secretary's Desk. We believe some members do read this section.

Norm Read

NOTES FROM THE MANAGING EDITOR

I hope the contents of this, the first for 1984 in its new form, will meet with approval, even if the format and reproduction do not!!

We have, among other things, one article offering some 'light relief', two on 'layouts' and four

on 'modelling', so there should be something for everyone there.

I have one article on 'layouts' on hand, plus some rather fragile promises of a couple of others, but I would like to see more. So, please, some

of you people out there, send in a layout plan, a brief description and perhaps some pictures and let everyone know what you have done.

More 'How To Do It' pieces are also desired; never mind if you think everyone knows 'whatever it is', maybe they don't! I even heard the other day of a chap who didn't know what a 'piercing saw' was - I thought everyone would have know that, but he didn't. See what I mean?

I also hope that the information presented under the heading 'A Member Versus the 'Trade'' may clear away some of the clouds and doubts about the reasons for the costs of imported models and materials - BUT, if you want to comment, make it fast, short and 'to the point'.

Also, a further word of warning - any long-winded dissertations which will tend to produce bitter and acrimonious argument if printed will receive short shift in 1984.

If you have anything to say, say it by all means, but try and keep it to matters of general and modelling interest if you want to see it printed in 'Pop Valve'.

Complaints regarding the management and operation of the Association should be referred to your Branch Committee for referral to the Federal Committee - NOT to Journal.

Happy modelling in 1984.

Gordon Duncan

FROM THE COMMITTEE ROOM

AMENDMENTS TO CONSTITUTION : BALLOT RESULTS

<u>QUESTION NO</u>	<u>YES</u>	<u>NO</u>
1	282	2
2	278	6
3	275	9
4	277	7
5	275	9
6	274	10
7	272	12
8	270	14
9	277	7
10	272	12

David Bennett
Returning Officer

FROM THE REGISTRAR — MEMBERSHIP THERMOMETER

Figures below are as at 11 November 1983. Figures in brackets are for 1982 at the same time.

	<u>SENIOR</u>		<u>STUDENT</u>		<u>FAMILY</u>		<u>TOTALS</u>	
<u>NEW SOUTH WALES</u>								
Renew	162	(210)	7	(10)	9	(16)		
New	19	(12)	1		8		206	(248)
<u>VICTORIA</u>								
Renew	136	(189)	6	(9)	5	(4)		
New	12	(8)	1		4		164	(210)
<u>QUEENSLAND</u>								
Renew	50	(49)	-		7	(4)		
New	6	(3)	3		2		68	(56)
<u>WESTERN AUSTRALIA</u>								
Renew	77	(83)	2	(4)	10	(7)		
New	4	(9)	1		1		95	(103)
<u>SOUTH AUSTRALIA AND NORTHERN TERRITORY</u>								
	4	(4)	-		-		4	(4)
<u>TASMANIA</u>								
	1	(2)	-		-		1	(2)
<u>ACT</u>								
	3	(5)	-		-		3	(5)
<u>OVERSEAS</u>								
	8	(8)	-		-		8	(8)
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	482	(582)	21	(23)	46	(31)	549	(636)

THE VULCAN VALE NARROW GAUGE RAILWAY COMPANY.

by Roger Lloyd

Rick Richardson's Vulcan Vale Railway is a most striking and unusual model railway, with a long and fascinating history. It is probably the oldest continually existing layout owned by any past or present member of AMRA, as the basic track plan came off Rick's drawing board way back in December 1952, and remains virtually unaltered to this day. Yet, prior to that, he had futilely tried on many occasions to design a layout for O gauge, with negative results. Mainly, he tells, because all those earlier schemes were based on 6' minimum radius curves and were intended for a room only 13' wide - surely the model railroad equivalent of trying to pour 'a quart into a pint pot'. Success only came when the (then) outlandish proposal of modelling a narrow gauge mountain railway using HO track, but the much larger scale of $\frac{1}{4}$ " to the foot was adopted.

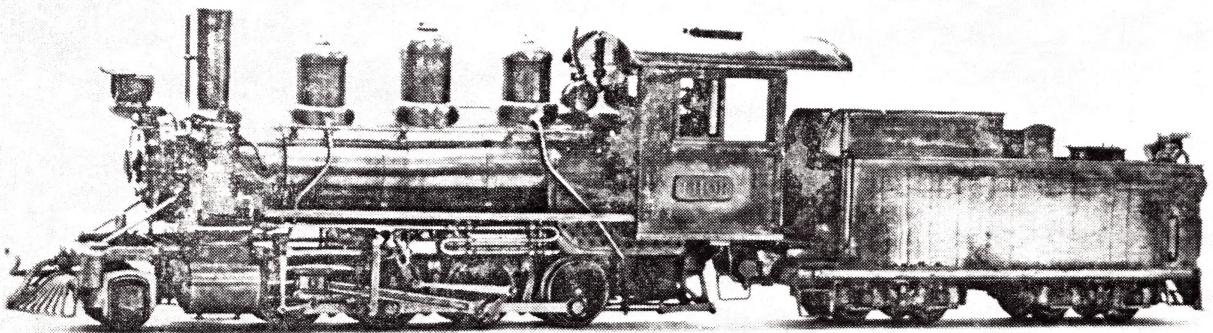
Of those early formative days, Rick writes, and I quote, "the diminutive size and indefinable charm of prototype narrow gauge engines and cars was not the sole attraction of this odd-ball scheme. Archtypal narrow gauge lines around the world were often by necessity the 'freelancers' among real railroads. Most of them operated over trackage with much tighter curves and steeper grades than those used on standard gauge systems, and a 1 to 48 scale model could therefore be shoe-horned into less space while still retaining that essential ingredient of good model making - credibility!".

The Prototype

The Vulcan Vale Railway is based on a mythical prototype existing 'somewhere in Australasia'.

This phantom road was supposed to have been constructed in the early 1920s to haul mined and partially processed 'tinkle' from a tiny mining village called Pseudo. The railway clambered through the mountainous Vales of Vulcan to the town of Charade, where there existed a factory which manufactured 'plinkers' from the raw trinkle. Purple plinkers, in fact, which apparently were highly prized in those days. The trinkle mine, the mill that processed it, and purple plinkers, were all invented, so Rick claims, with one idea in view. No rivet counter could ever accuse his railway of being untrue to prototype!

The ruling grades of 1 in 25 through those precipitous valleys were soon acknowledged as too steep for most conventional rod locomotives, so these were relegated by the Vulcan Vale Company to yard duties. Main line trains were from then on hauled by the mainstays of the motive power fleet, three Shay engines. A notable exception to this was a heavy 2-8-0 Consolidation, which was always based at Mt Thunder Siding. 'Thor', as it was named, acted as a pusher upgrade, and provided additional braking downhill. This big engine is currently set aside awaiting a new modern motor and new wheels, after which it will return to its old haunts on the 'big hill'. Rick describes his railway as 'unashamedly freelance', as were many of its full size antecedents. He has, however, always borrowed heavily from the local Victorian 2'6" gauge prototype for dimensional data, so, although the rolling stock and engines are 'invented', they certainly 'look right'.



The original 2-8-0 Consolidation - Taken 1956

Photo - Rick Richardson

Construction

Construction of the layout was commenced in January 1953, although in the preceding couple of years the substantial building specially designed to house the diorama was single handedly built by Rick. Because practically everything for On30 had to be scratchbuilt, assembly of the embryo railway proceeded slowly until 1960. By then

the complicated framing and trackbed, and basic undetailed coat of plaster had been fabricated, together with an engine (the 2-8-0 previously mentioned) and some rolling stock. In those long gone days, the track was English 'Wrenn' OO tinned steel on black fibre sleepers. The tin plating soon wore off the rail heads, and then it was necessary to run trains almost every day. Other-

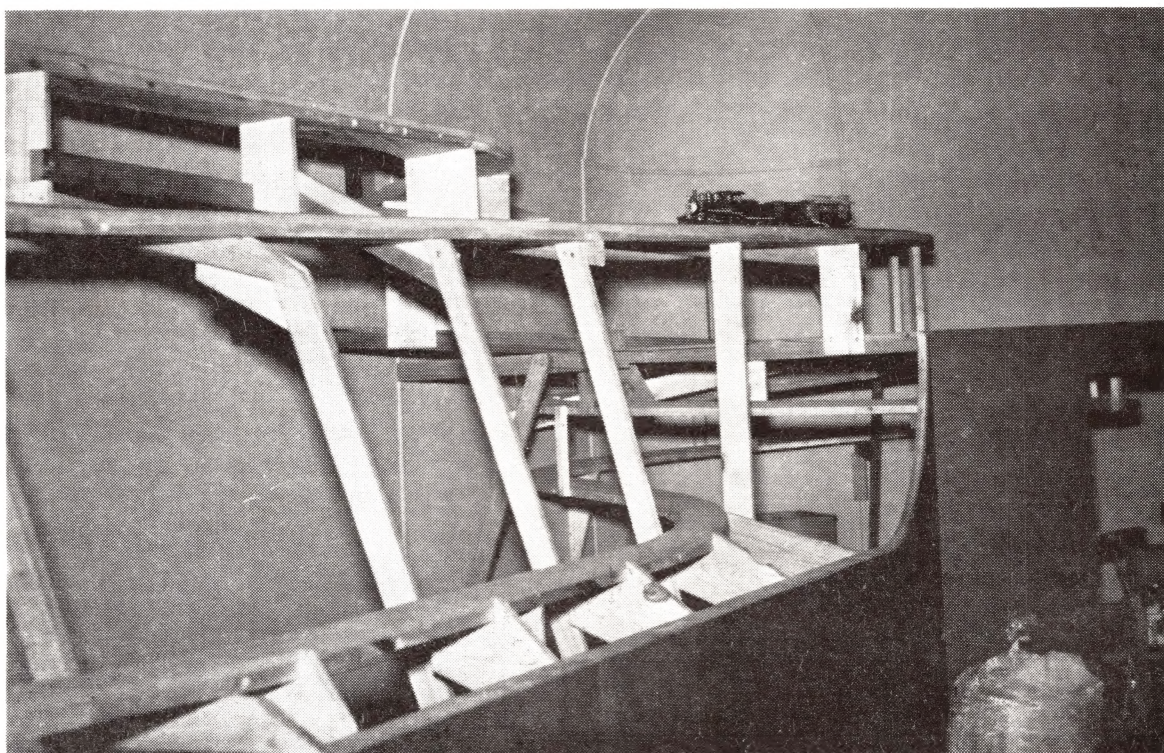
wise the rail rusted, and engines refused to move!

About this time Rick found himself involved more and more in commercial display model making for museums and exhibitions. This was not so much from choice, but as a welcome adjunct to this normal salary. In any event, the still embryonic Vulcan Vale Railway took less and less of his interest, and finally the whole scheme ground to a halt. As the years rolled by, he occasionally looked at that somnolent 'folly of his youth', but never seriously imagined it would ever progress any further.

By 1978, 18 long years had passed, and the railway had quite literally disappeared from view under an untidy litter of stored furniture and household bric-a-brac, for the room had long since become nothing but the family junk store. Through sheer neglect, the building housing the abandoned layout had got into such a sorry state it was showing ominous signs of collapse. So one weekend in September of that year, Rick decided to thoroughly examine the structure to see whether renovation was feasible. The alternative was complete demolition, which, of course, would have included the

diorama as well. As part of this inspection, he had to venture under the layout with a lead light, something he had not done in many years. Let his own words describe that fateful day.

"In that temporarily illuminated cave of my own construction, I sat on the floor in the dust and looked at how that cavern was made. In this substantial space below the layout, where it was possible to stand erect inside the 'mountains', permanent lighting had always been intended, but never installed. Because of this lack of convenient light, the enclosure and its contents had remained undisturbed for years. In fact, the whole sub-space was something of a time-freeze zone, cradling cobwebbed model railroad things dating from the 50s and earlier. All that patient meticulous construction accomplished so long before suddenly became nostalgically apparent. What would the project have looked like if it had been continued? We all know that drug addicts and model railroaders are never really cured! Then and there that venerable partly made model scenery and the remaining fragments of rusted track got to me."



The formwork - looking towards Mt Thor - 16/6/56

Photo - Bryan McClure

I am happy to report that the building was systematically and thoroughly renovated, even though demolition would have been more practical. A new workshop was added, layout lighting installed, the mountainous scenery carried on to near completion, and then gleaming new nickel silver track laid. Like a butterfly emerging from its drab cocoon, the sleeping Vulcan Vale NG Railway finally stirred, stretched itself, and once again became a very much alive and operating entity.

And now comes one of those curious happenings in life which makes truth stranger than fiction.

Rick and his wife have two sons, John and Grant, who were very small children when he commenced to build the Vulcan Vale. Neither of the boys took any interest in their father's hobby, nor showed any particular inclination towards serious model making. In adulthood they both eventually married, and with their respective wives, both moved interstate. It was during the several years of their absence that the reincarnation of the VVNGR took place, so that on their return to reside in Melbourne, the Vulcan Vale had been reactivated.

John immediately became absorbed in the oper-

ational aspects of the railway, and to this day is the acknowledged master of train running on the layout. Some people have a 'way' with animals or perhaps birds. For John, the engines and cars of the Vulcan Vale 'do what they are told' - even when visitors are present! Grant waited a few months, then one evening offered to help his father make windows and doors for the large trinkle mill, then under construction. He had never before built a model, but within a few hours he was hooked, and a fine prize-winning railroad modelmaker was unexpectedly discovered!

Scenery

As the photographs show, the rock formations are a major feature of the layout scenery, and are based on geological examples found in different areas of Australia. Although the individual rocks appear to be cast singly and then piled together, this is not the case. A standard 'blend' of 40 parts of 'Polyfilla' and 60 parts of sieved, washed, but dry sand with added colouring is mixed with water in a small bowl to a thick creamy consistency. Each boulder is formed by pushing a tablespoon of the mixture off a 25 mm wide stainless steel spatula with a 20 mm wide stiff bristled brush onto the base plaster. Final shaping of the rock

is accomplished with a wet brush as the material is setting. The average thickness of the finished groundwork is about 15 mm, and it is enormously strong, easily supporting the weight of an adult man. Seven 25 kg drums of 'Polyfilla' have so far been used in the scenery, and combined with the sand content, it is known that the Vales of Vulcan currently contain around 3/4 of a ton of this material.

The diorama is well lit by 700 watts of continuous fluorescent lighting hidden by a valance which follows the line of the layout benchfronts. These benchfronts are flush panelled, with doors for access to the under layout areas, and also contain built-in drawers for material storage. It is all so neat that I feel ashamed of my own cluttered and untidy layout room. The blue painted hardboard backdrop curves on a 2' radius from the rear walls into the ceiling on the rear and end walls of the room behind the layout. Rick was concerned that the half round beading (a relic of 1952 technology), which covered the hardboard joints in this 'sky' intruded, particularly in photographs. Recently these beadings were removed, the joints made flush, and the sky recoloured. A long, difficult, and very boring project finally completed, says Rick with a sigh of relief!!



The plaster is laid - 16/9/56

Photo - Bryan McClure

The Track Plan

The layout is a simple point to point plan with a passing loop at Mt Thunder Siding, situated approximately half way along the route and near the crest of the line. There is a great deal of hidden track, including a spiral, and trains disappear from view for long periods. Because of this, trains were sometimes 'forgotten', with highly interesting results. So Grant installed

detection circuits every four feet in the concealed sections, using light dependent resistors, which now indicate the location of trains on visible 'progress panels'. This installation was part of a complete redesign and rewire of the electrical system completed by Grant during the first months of 1983, together with three newly constructed control panels.

The track is one of the few propriety items on the layout, being Peco On30 (16.5 mm gauge, but with larger and wider spaced sleepers). Some Shinohara code 100 HO track has been used in sidings and yards, but here the 'undersize' sleepers are completely buried under ballast. All the ballast consists of crushed and sieved (to scale size) plaster/sand 'rock' left over from scenery making. Fixed in place with white glue diluted 1-1, this has set as hard as the rock surroundings. Points are Shinohara code 100, numbers 6 and 8, mostly operated by hand throw levers and rodding. The exceptions are turnouts in awkward to reach locations, such as those at Mt Thunder Siding, which are motorised. The main layout room is 25' x 13', the minimum track radius is 30", and the yards at each terminus are at 3'6" elevation. On route, the line drops to 27" and climbs to 63" at the crest on four percent grades.

Operation and Rolling Stock

Track power is through three 'Locomotion' 2.5 A matched transistorised controllers specially modified for the line by Ron Bayley, the proprietor of Locomotion Productions. The 'shunt' or direct d.c. wiring has been removed from these units, and all locomotive movements are permanently by 'inertia' or pulse power. Even three Shays coupled together on one train upgrade use only 10-12 volts, and do not lift the ammeter needle from zero; a far cry from the old open frame motors of earlier days! With this control set-up, it is impossible for the most ham fisted operator to make a 'jack rabbit' start! The Richardsons are most pleased with the performance of this equipment.

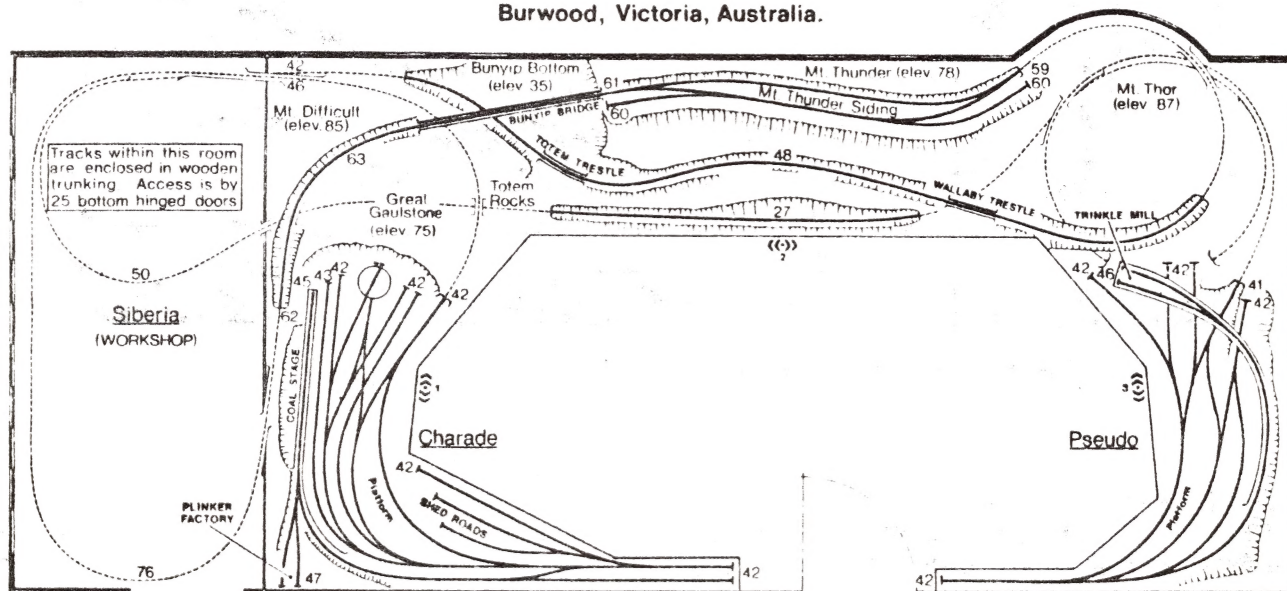
With the Shays running at a prototypical average scale speed of 5 to 10 mph, operation is cer-

tainly leisurely on the Vulcan Vale. It actually takes about 25 minutes continuous running for a train with a Shay up front to traverse the line from end to end. With a stop at Mt Thunder Siding to pass an opposing train, this often becomes 30 minutes. Definitely not for the masochist who normally ends up a nervous wreck at the end of an operating session on a busy HO railway!

The Richardsons currently have three Shays, two of which are tee-boilered 16 tonners manufactured by Precision Scale Company, and rebuilt from wood burners to coal. The third is a completely rebuilt US Hobbies 13 ton Shay, altered to match the PSC units in size and detail, and converted from oil to coal fired. Hopefully, the next engine will be an 18-20 ton Climax geared locomotive. Four rod engines (three scratchbuilt) complete the present motive power roster, although they have two unassembled kits, both designed for On30. One is a 1914-18 Baldwin 2-6-0 'trench' loco, the other an O-6-0 German Koppel tank, with what appears to be the most complicated valve gear ever invented by man. The Vulcan Vale is currently equipping the Shays with 'Modeltronics' sound.

All the passenger and freight cars are scratch-built, and would have to be the best constructed collection of rolling stock I have seen. One advantage of O scale is the amount of detail that can be added, and the breakdown crane is a good example of this. I was most impressed by the decaying and rough appearance of the wood planking on the bogie flat wagons. The Vulcan Vale breakdown train won the rolling stock section of the AMRA 1983 Open Modelling Competition at Camberwell for Rick and Grant.

Schematic track plan of the VULCAN VALE NARROW GAUGE RAILWAY On30 Burwood, Victoria, Australia.



Length of run approximately 150 feet Charade to Pseudo
Figures at trackside denote elevations in inches above room floor. Shop floor is 21 inches below this datum
Broken lines indicate track concealed from viewer, but all these hidden sections are accessible from beneath the diorama superstructure (()) Denotes control location



Scale in feet
0 1 2 3 4 5
Original design - Dec 1952
This redrawing - Apr 1983

Design & drawing - Rick Richardson

Rick's attention to detail is not confined to the layout. He designed the Vulcan Vale emblem which appears on his track plan, letterhead, and Complimentary Pass to the road. I certainly hope that one day you also may enjoy the Vulcan Vale's invitation to 'travel with us into yestertime'.

FOOTNOTES:

1 In case you are still wondering what trinkle is and plinkers are, then the Latin motto on the

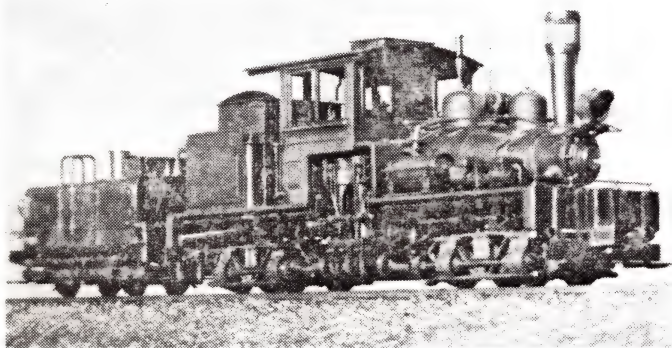
emblem of the Vulcan Vale Railway gives you a clue. "Inter nos cum grano salis" translates as 'between ourselves - with a grain of salt'.

2 The author thanks Rick for supplying the track-plan and the notes on which this article is partly based, and which were originally prepared for the ill-fated 1983 Port Phillip Convention.

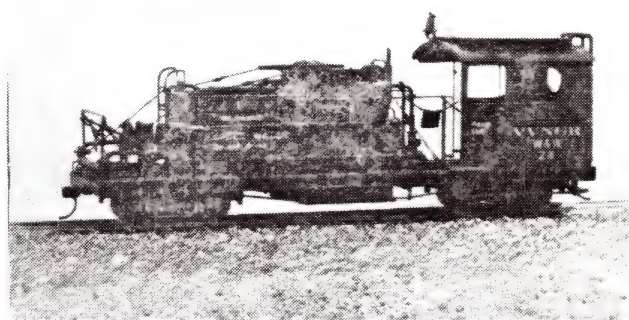


Wallaby Trestle and Mt Thunder - June 1980

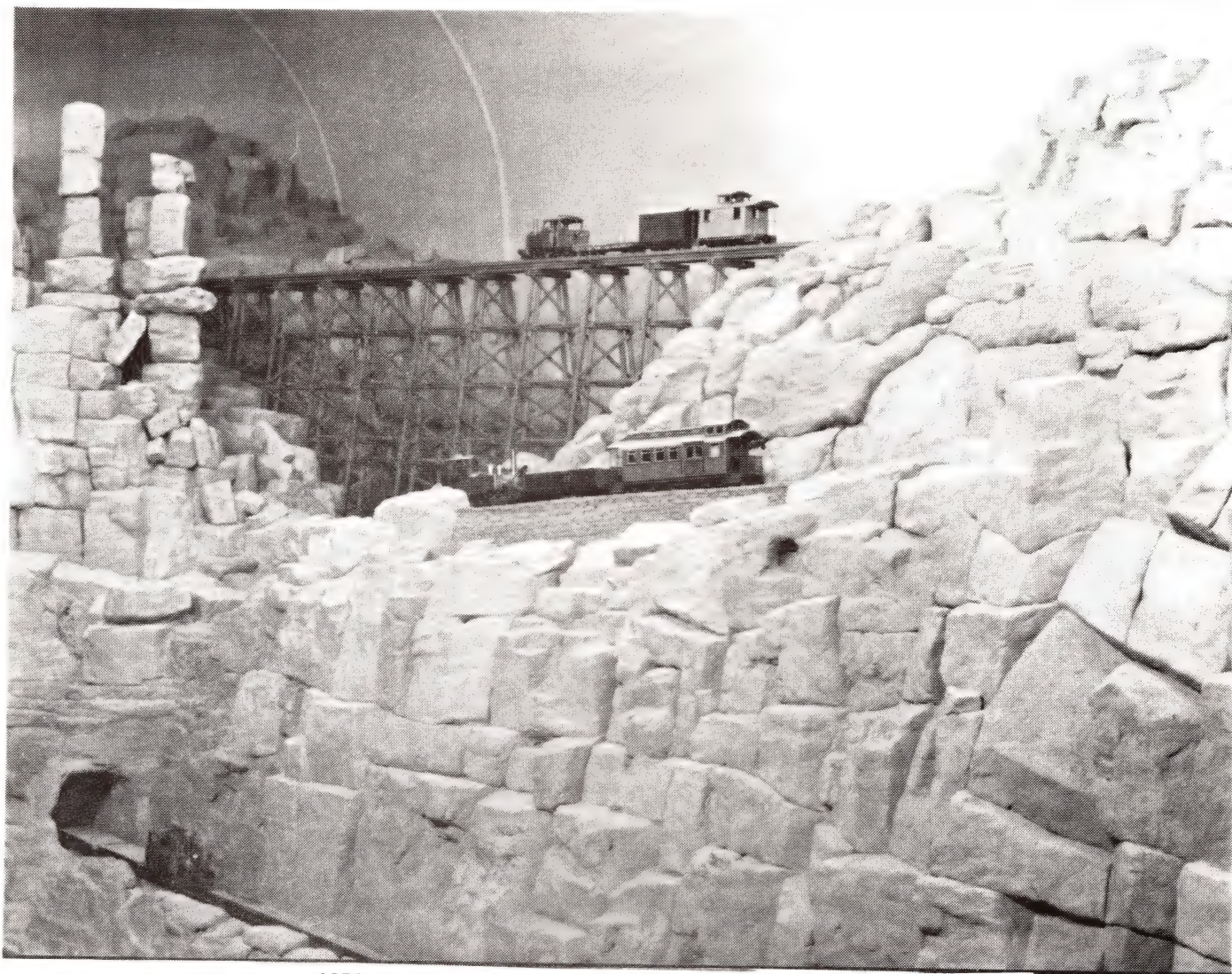
Photo - Rick Richardson



13-ton Shay



'Weedex' Wagon



ACTION ON THREE LEVELS - A Shay is on Bunyip Bridge, the Porter 2-6-0 is about to cross Totem Trestle, while the German 'Koppel' tank has just emerged from the tunnel. Totem Rocks are on the left.

Photo - Rick Richardson



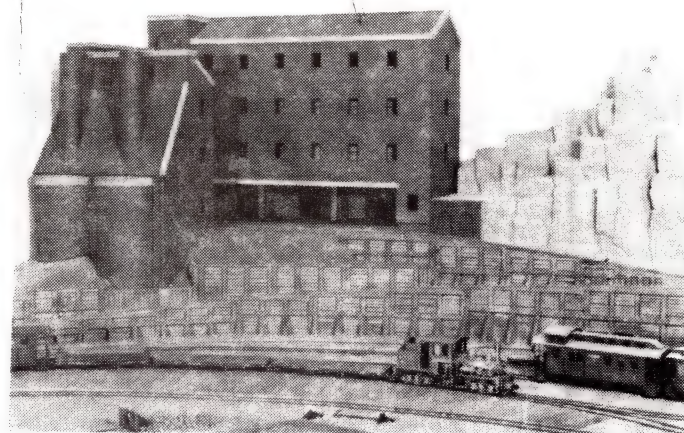
A Shay works hard up-grade over Wallaby Trestle

Photo - Roger Lloyd

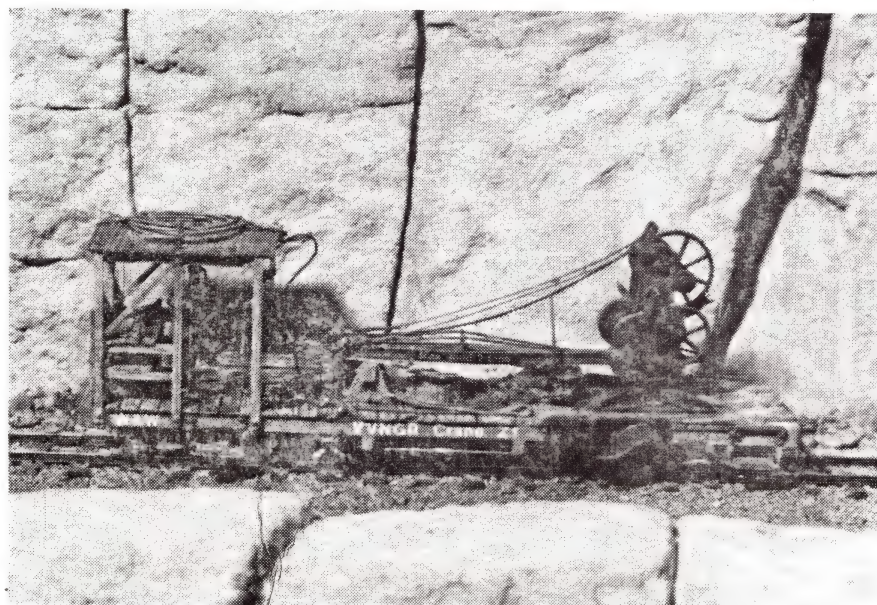


Close up view of the Roller Trinkle Mill

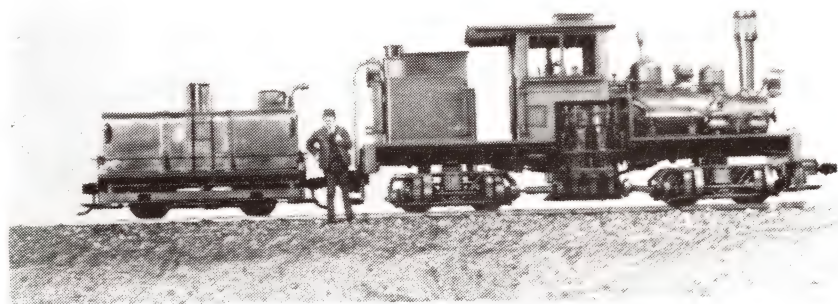
Photo - Roger Lloyd



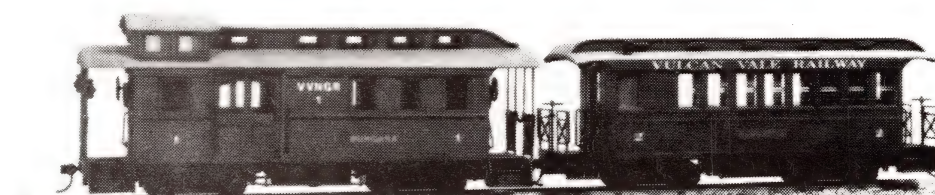
Plinker Factor at Charade



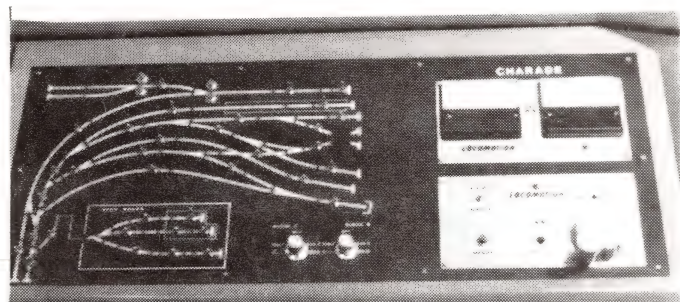
Breakdown Wagon



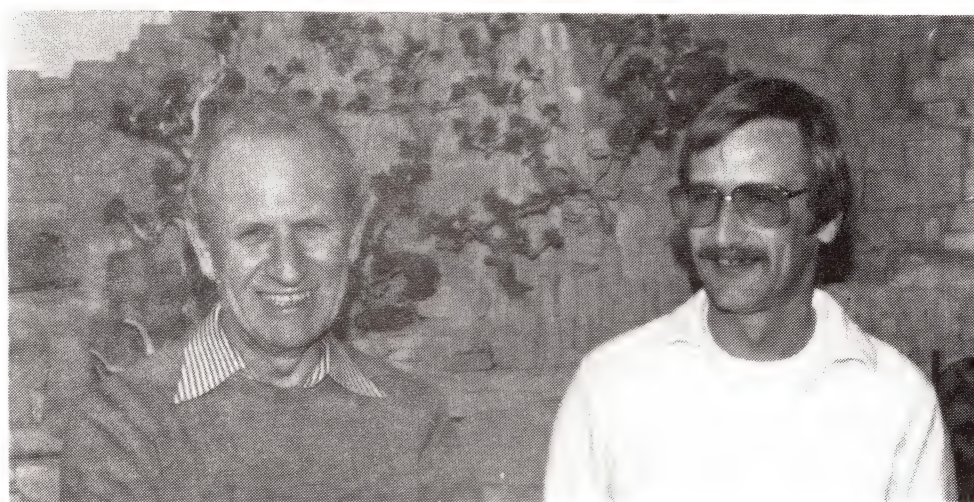
13-ton Shay



Passenger Car and Van



CHARADE PANEL



Rick and Grant Richardson

Photo - Roger Lloyd

THE DIGNITY OF OUR PROFESSION

Submitted by the AMRA, Queensland Branch

The following essay, whose author is unknown, was published in the 'Sunshine Express' over 12 years ago. The humorous account, which appears to be written by a locomotive engineman at the Mayne loco depot, Brisbane, in the 1930s or 40s, details minor difficulties confronting drivers and firemen in the days of steam.

How many locomotive enginemen, while wiping the soot, the grease and grime from their face and hands, appreciate the dignity of their profession?

I can understand the pride one feels in the handling of a huge, majestic looking locomotive, dazzling bright with its polished brass bands surrounding the shining black boiler, with wheels, side rods and motion glittering in brilliant cleanliness, and panting like a racehorse or sleek greyhound straining at the leash to dash after the tin hares.

It is a pleasing sight to see the driver and fireman coming on duty about 2 am looking spick and span in their white tropical suit. They have every appearance of being completely freshened up by a night's peaceful sleep. Stepping briskly into the sign-on room, the driver draws from his pocket a fountain pen heavily mounted with gold, and signs on for duty. 'Duty' is a pleasant work; it reminds me of something England expected, according to Lord Nelson.

But loco drivers and firemen need no speeches to remind them that they are expected to do their duty. They glory in doing it, not because they like work, but because everything is made so congenial that they just love to come to work and duty. It is really a form of recreation.

To become an engine driver, one must secure a position as engine cleaner, examinations are held periodically. To pass the examination, one requires a University education. The reasons for this are, firstly, it ensures that only the cream of the nation's youth are employed, and, secondly, the manners acquired at a University are an advantage in having a cultured cleaning staff right from the commencement.

A gentleman is under engagement to tutor cleaners in their profession. The uncouth might call him 'boss of the cleaners', but that is not Brisbane language, not as 'Tony' as we like to hear. Where possible, ex-Sunday school teachers are selected to ensure that the right spirit (there is no objection to beer) will prevail. Special attention is given to training cleaners to be courteous and obliging. The value of this early training is noticeable when a driver is greeted with "Good morning, Mr Mulquinney. I sincerely trust you are well, and that you have been completely rested, and that your locomotive is cleaned to your satisfaction". Swearing is definitely prohibited. Anyone found guilty of using obscene language is instantly dismissed. But, of course, there is

never any justification for swearing - everything works so smoothly.

As I have said, going to duty is, for enginemen, a form of recreation, like going to a fight. The resemblance to a fight is due to the fact that the driver will probably have to fight with the roster clerk over his working, or with the foreman over the engine being too clean, or in a sound, roadworthy condition.

Of course, the locomotives are always found to be in a sound condition - some sound louder than others. But in all cases, it is an inspiring sound. It inspires the fear that the whole thing will fall to pieces.

As I have said, the locomotives are in good condition, in fact, to use a colloquialism, they are in 'rattling' condition. This rattling is an advantage in that it makes it difficult to carry on a conversation, and that in turn permits of the fireman reading the newspaper going along, and studying the form of likely starters at Albion Park, without interruption from the driver.

It may not be well known that at Mayne we have quite a number of wealthy men; not wealthy because of their earnings at their employment as enginemen, but as a result of consistently backing winners at the races. It is not unusual for many of them to win anything up to 500 on a Saturday, and in such occasions, they complain of being taken off a shift commencing at midnight that night; it is not that they want to earn some money, it is because they like their work.

Reverting to the cleaners, it should be pointed out that, after undergoing about 20 years' intense training as cleaners - a process of toughening as they say in the Army - they are promoted to firemen. To obtain promotion, they must accept transfers to the north. This, of course, is regarded as a delightful change. The fact that accommodation is unprocurable at the depot to which they are transferred does not perturb them, for they know that every consideration is given to their needs. The Railway Commissioner, knowing of their fastidiousness and objection to crowded slums, refrains from building accommodation for them in the crowded cities of Hughenden, Julia Creek, Richmond, Cloncurry, and such like seaside resorts. Knowing how fond they are of their work, and their desire to live close to it, huts or tents are provided in the railway yards. This is an advantage, in that the men do not get lonely. They are at liberty to watch railway activities - the arrival and departure of mail trains, without having to incur the expense of purchasing a platform ticket.

Firing a locomotive is a healthy profession. It is an open-air life. Firemen are not cooped up in offices with radiators in the winter and fans and ice-water in the summer. There is a variety of the starting and ceasing times so that they escape the monotony of starting every morning, except Saturday and Sunday at 8 am, and finishing at 5.20 pm. They even escape the monotony of having every Saturday and Sunday free, attending

football matches every Saturday becomes monotonous. They are given the chance to sleep during the day and work at night. They are not tied down to the routine of three regular meals every day. Of course, it is difficult to have meals while working passenger trains, but firemen are so anxious to work, as to be averse to stopping for a meal. They prefer to go without, until arrival at their destination, so that they may fry some tough steak and chew it in the barracks. The Department may have suggested making provision for men having a three-course meal, but knowing that firing a locomotive is not laborious, they concluded that enginemen would regard it as a sleight, and an indication of lack of stamina in being unable to work 12 to 15 hours without a meal.

In order to assist firemen, however, the engines are maintained in first class condition, particularly as regards steaming qualities. To make doubly sure, only first class coal is used. Some call it 'Fireproof Coal', but that is merely sarcasm, because tests reveal that if perservered with, the coal will smoulder away, consequently it is not, strictly speaking, fireproof coal.

Firemen are very fond of the locomotives. They can frequently be heard enquiring about them. It is quite a common thing to hear one fireman ask another, "How's she doing?". Now and again the reply has been "She's a slugger", or something that sounded like slugger. I could never quite understand how the term 'slugger' applied to a locomotive. One one occasion, I heard a fireman say, "She's a fair Dastard". That fireman could not have had a University education, because a dastard is defined as a coward, a poltroon, really a person who shrinks from danger; consequently, the term is not applicable to a locomotive. I

can vouch for that, because I have seen locomotives courageously trying to make steam and haul the heavy loads with which they are burdened.

One of the most pleasant tasks associated with the work of a locomotive fireman is 'cleaning the fire'. Firemen are like that. They don't like anything dirty about the locomotive, particularly a dirty fire. Coal miners must be dirty because they send dirty coal which in turn makes the fire dirty - so dirty in fact that if it is to be kept spick and span, it needs cleaning every few miles. Cleaning fires is nice work, particularly on a hot summers day, with the temperature around 100° in the shade, and 175° in the cab. On one occasion a fireman placed a thermometer in the cab, but the quick silver started to boil and bubble, and the steam escaping from it formed a rainbow around his head. It was a beautiful sight, but the fireman got scared and threw the thermometer away. The steam escaping from leaky joints inside the cab is helpful in keeping the air moist, and counteracts the dry heat of the west. It provides a variation. If you want a moist heat, you stay in the cab; if you want it dry, you leave the cab. Simple isn't it. It demonstrates the ingenuity of our engineers.

Naturally, the firemen get very hot cleaning fires. They perspire so freely that they need a shower immediately after, so, to meet such a requirement, arrangements have been made for them to fill the tender with water. During this operation, the rush of water from leaking hoses provides the shower. To save the time, firemen are given this shower with their clothes on.

Yes, firing a locomotive is an honoured profession. On some future occasion I will tell your readers about the driving.

SOME THOUGHTS ON LAYOUT PLANNING

by John Thomas

Many years ago, the late Al Kalmbach, publisher of 'Model Railroader' and the Kalmbach railway books, wrote that Frank Ellison took him to task because he spoke too much of model railroad layouts. Frank said, "A man doesn't build a layout. He builds a railroad".

The successful model railway is built around an idea. That idea determines the track plan, the scenery, the equipment run and the operating pattern. The central idea is of a certain railway running between certain places and built for a certain purpose.

Railways don't just happen. They aren't just built anywhere. A railway was and is a way of moving large quantities of goods or large numbers of people as quickly and efficiently as possible.

Before you begin to build a model railway you need to pick out or invent a group of cities, mines, ports or what have you, between which large amounts of freight or people must travel. Then comes the route. Where would a real railway be built. Along a river valley, over a steep mountain

pass, across the rolling plains or perhaps down the side of a deep mountain gorge. Would the traffic on the line justify double or multiple tracks or would a single track handle the available traffic, and, if so, where would passing loops be situated and how often would they be needed. What kind of terminal facilities would be required. Will the line carry mostly coal over steeply graded lines and need heavy motive power, or will it shift only general merchandise and passengers over level routes in which case Pacifics can handle both passengers and freight. Now that you are getting the idea, it can be a lot of fun to work out all these details. All these different things should be considered whether you freelance or base your railway on a particular prototype. If you use a real railway as a basis you have a lot less imagining to do.

Unfortunately, unless you have a basketball stadium at your disposal, not much of the railway will fit into the space that you have available. So how do we fit all this into the limited area we have. It is probably better to forget the main line and just to concentrate on one of the

main features. This might be the junction with the main line, it might be the terminus in a large metropolis. A coal road might have two big features - the mine where traffic originates and a yard where transfers to other railways or ships takes place. Personal opinion will change these key features and what one man likes will be far and a way different from that of another.

Whatever the key feature, it should be selected and planned with some care so that it fits into the freelance design or with the real railway on which you based your railway and the rest of the planning then becomes very much easier. The main line can be draped around the rest of the area

that is available so that the key feature is connected to the continuous run, the return loop or the fiddle yard, whichever is desired. Scenery is created to conform with the basic idea. The track is level, up or down, or straight or twisty according to the type of railway that was planned.

Give it a try, even if you already have a model railway, try planning a new one this way just for the fun of it. Keep your mind on the railway you are creating and you will probably come up with a better plan than if you worried about loops, upper and lower levels, figure 8s and all that other layout 'chuff'.

THE SUNSHINE COAST RAILWAY MODELLERS SOCIETY

by K Dixon

On 6 March 1978, a meeting was held in the Nambour area to form a model railway club in that district to cater for live steam and electric railway modellers. Eleven attended that meeting, and the club was formed under the name 'Sunshine Coast Railway Modellers' Society'. The Club had its 8th meeting on 30 October 1978 and the Shire Chairman was the main guest, and the matter was raised about a piece of ground to build a live steam track on.

The idea was put to the Shire Council and approved. Early in 1980 the Council finalised arrangements and the grounds near Florence Street, Nambour, was handed over on a 10-year lease, with a further 10 years available at a low leasing fee for the four acre site.

Work progressed quickly, and soon all the steel for tracklaying was bought; the track being concreted in at ground level. The track plan has a large 7½" and 5" gauge track, 1600 feet long and a smaller internal track for 5" and 3½" gauges, 330 feet long. Eight sets of points are on the larger track, feeding two passing loops, two sidings and the loco depot area. All track was laid and concreted in six months; work being done on weekends. Vandalism is a problem and everything has to be made as vandalproof as possible.

On the weekend of 22 and 23 November 1980, the Club opened the grounds to the public. For the opening on the first running day, the Shire Chairman officially opened the 'Mini Train Park' as it is called, by driving a gold dog spike into the centre of the track. The Club's patron opened the platform, which is named 'Clarrie Vill' after the Club member who was the backbone of trackwork manufacture and installation.

By the Club's second birthday, the Council had built the toilets for the Club and provided some more shady trees to plant, plus extra soil to dress up the area. Club members installed picnic tables under the shady trees near Petrie Creek, and a BBQ was also installed. The main gate from Florence Street to the grounds is made from two QR signal posts and arms, which makes

the entrance easy to notice for newcomers and adds more railway atmosphere.

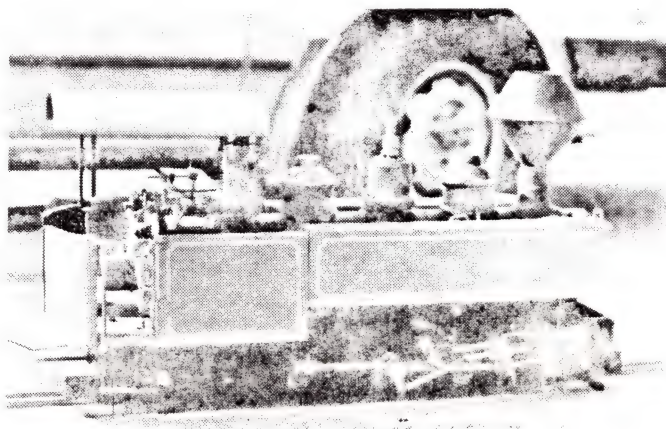
Early in 1983 the turntable in the loco preparation area was installed, and it is modelled on the standard QR 60' turntable. Six off roads are supplied off the turntable, plus two roads are in the steaming pit and another road is a loading ramp to assist in transferring locos from road transport to the rails.

The 'Mini Train Park' is only five minutes walk from Nambour Railway Station, or a minute's detour from the main (No 1) Bruce Highway (see location map).

As of August 1983, the Club had approximately 30 members, plus their families. The Club's live steam section has nine locos, plus eight 5" and six 7½" gauge passenger cars. Many more steam locos are being built by members. The Club holds its running days on the 4th Sunday of each month - except December. While for the smaller scales of model railroading, the HO/OO section meets at members' homes on the first Friday evening of the month.

So if you are passing through this area, or holidaying on the Sunshine Coast, please drop in and see the Mini Train Park if it happens to be a running day.

For Club enquiries, telephone 071 45 2613, or contact the Secretary, K Dixon, 14 Archie Street, Nambour, Queensland, 4560.



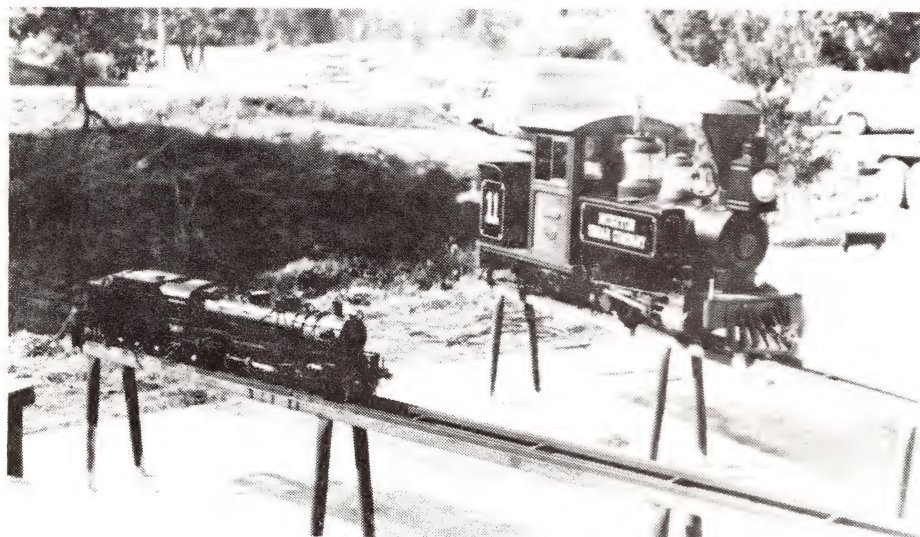
Another shot of EUDLO; the prototype now kept at the entrance to Nambour Sugar Mill.



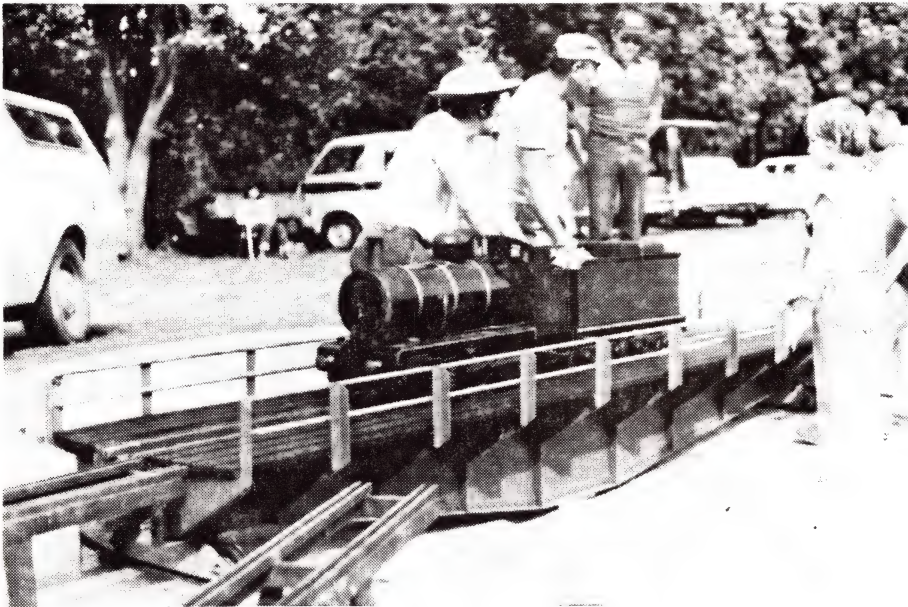
A 7 1/4" gauge 0-4-2T 'Plantation Type' loco has its water tanks filled at the Station by Mr G Hadley of Nambour, who built this loco. He has a 7 1/4" shay under construction; the prototype is preserved near the Nambour Sugar Mill.



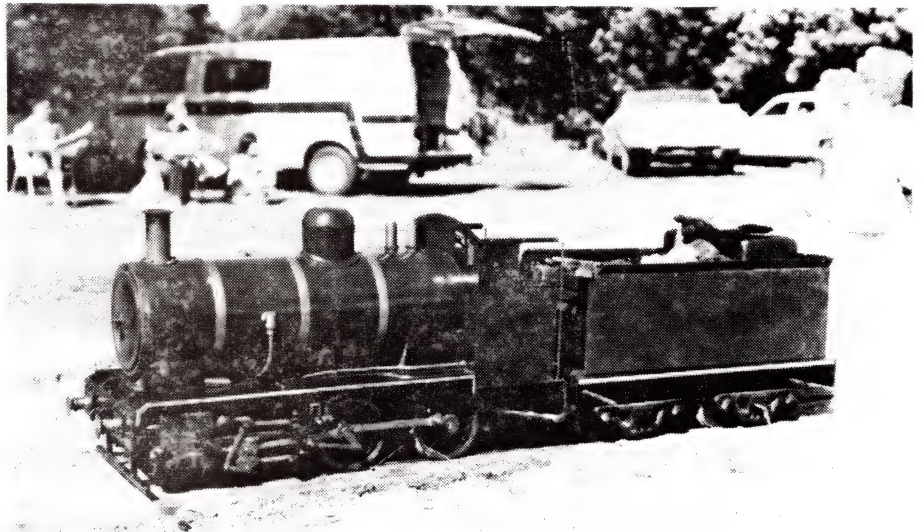
2 A 5" gauge NSW 422 class pulls into the Station driven by Allan Slack; this loco is owned by Club President Clarrie Hough of Buderim.



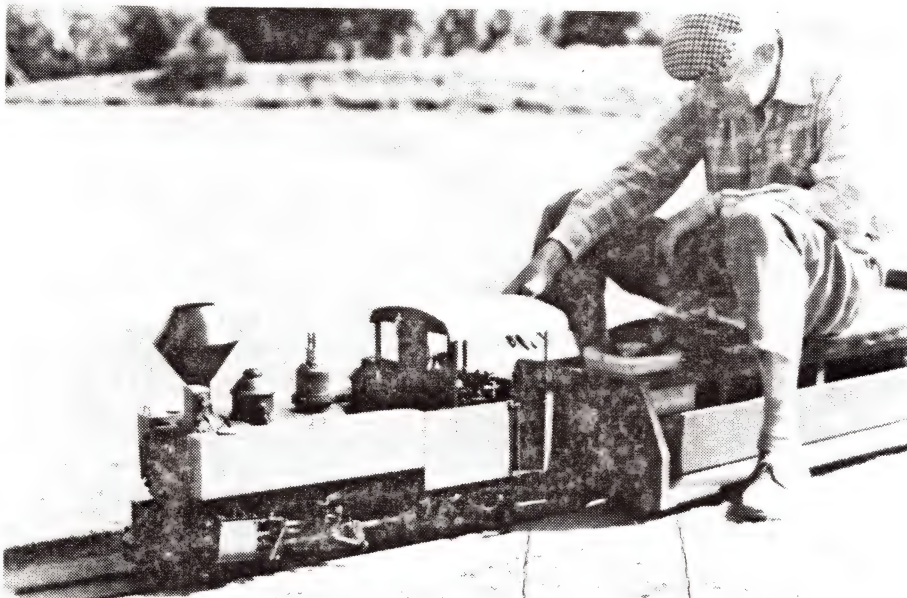
3 At the turntable area, NSW 5904, another 5" gauge loco owned by the President, stands by, and on the right No 11 simmers gently, while its driver takes a meal break.



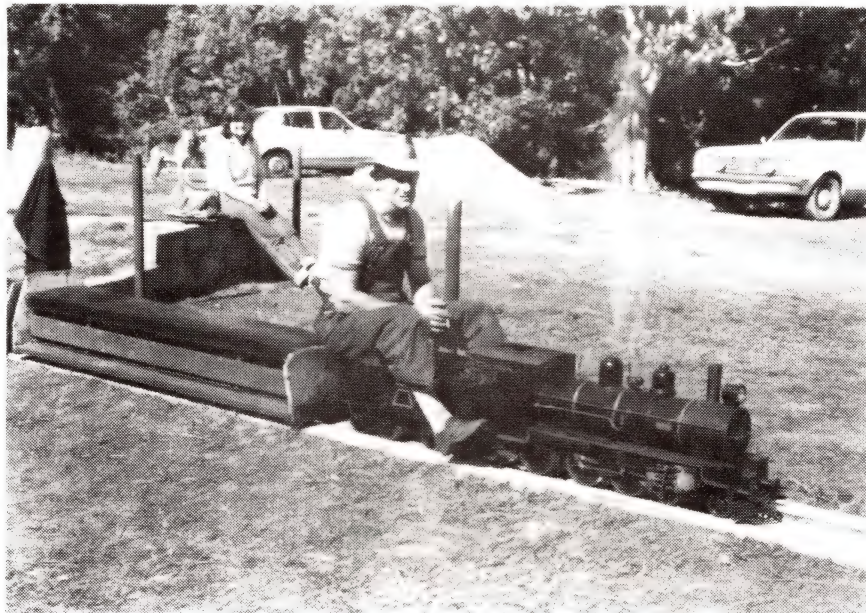
A recent addition to the track system is this QR style turntable.



5 A 7 1/4" gauge freelance 0-6-0 built by Neil Thompson of Gympie.

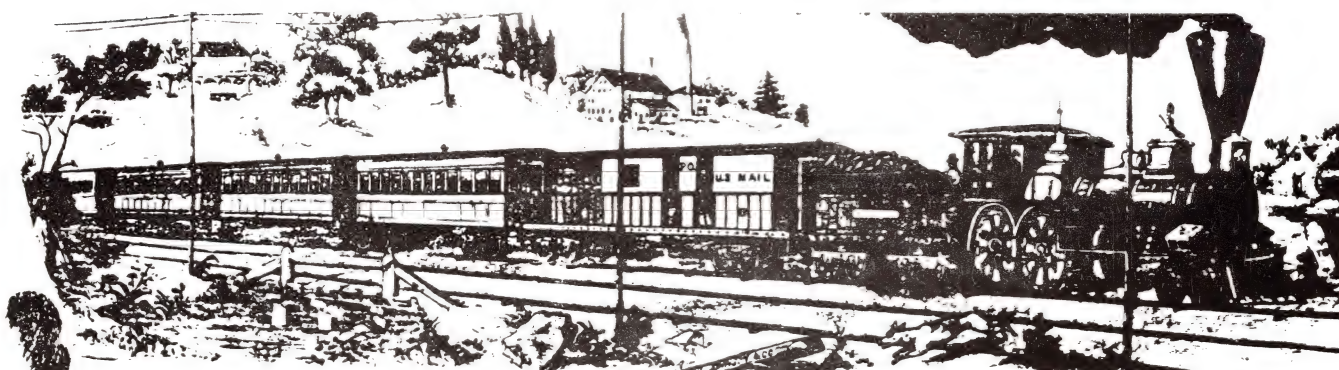
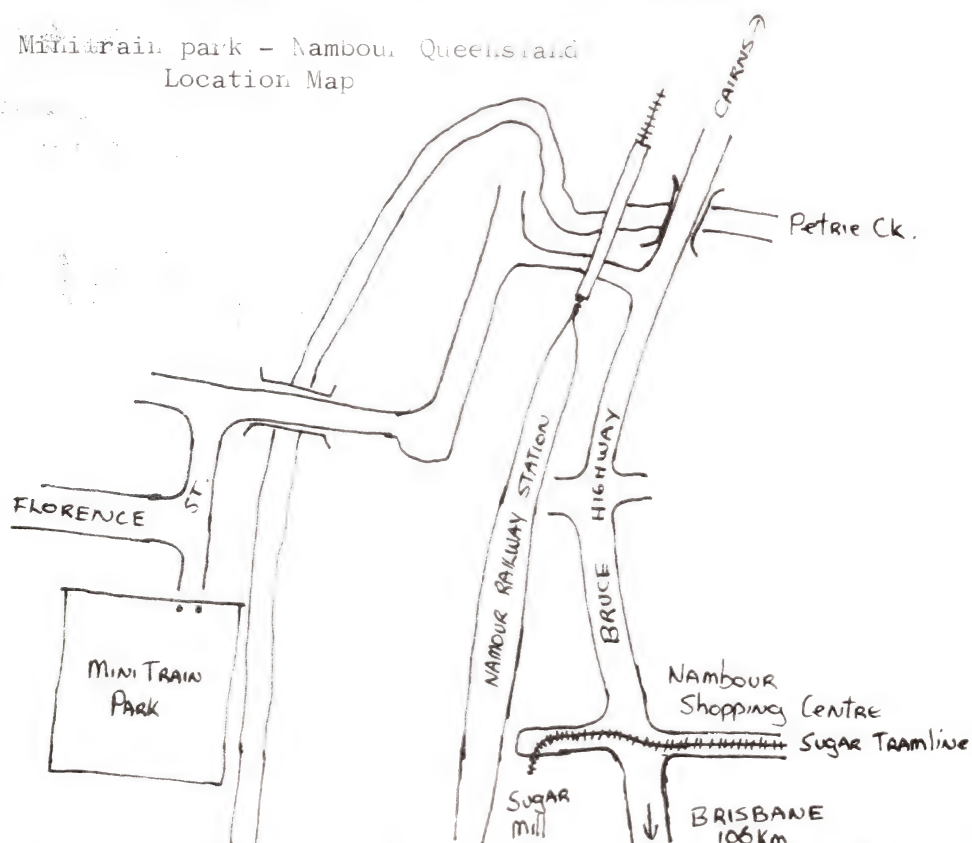


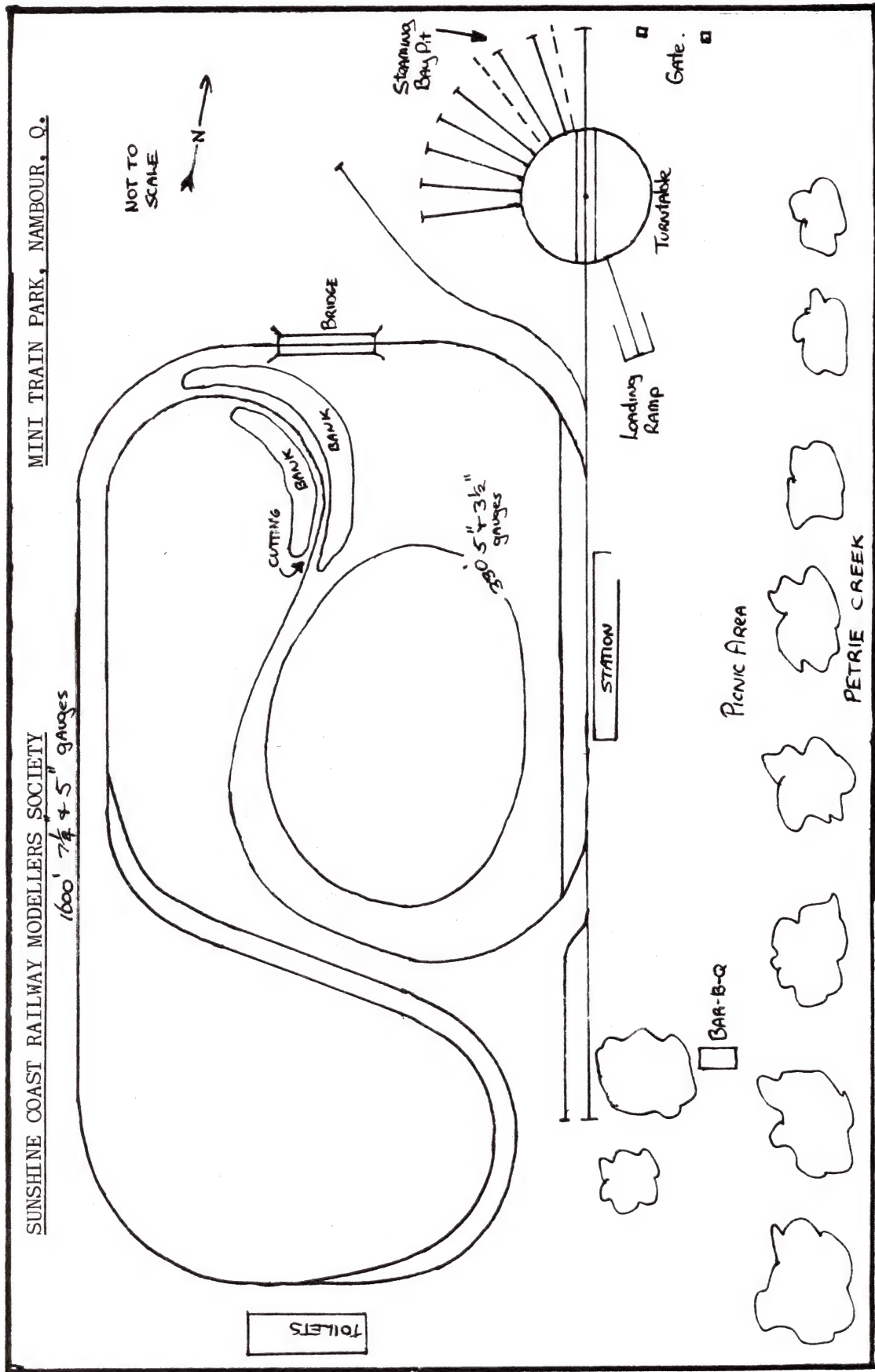
A 3 1/2" gauge model of EUD 0 built and operated by Mr G Maley.



The Author and Club Secretary, Mr K Dixon, waits for clearance to leave the loco depot and pick up passengers. The loco is a 5" gauge QR PB15 (1924) built by Jim Jackson and owned by C Hough.

Mini Train park - Nambour, Queensland
Location Map





"KICK THOSE POINT MOTORS"

by Allan Dowel

Are you having trouble with point motors that just won't quite operate? Well I was, and when I saw a clue about improving point motor operation in an overseas magazine, I lost no time in developing it to suit my needs. I called it the 'OOMPH' Power Pack (OO marvellous point hoperation).

It seems that there are two kinds of point motors; those that will not operate when friction is increased even a tiny bit, and those that pull so much current that only the heftiest of power packs can provide enough punch. Increasing the voltage is not a satisfactory answer either, and many charred or melted point motor covers are testimony to this.

The OOMPH makes use of condensers (or capacitors if you want to be fussy) to store power, in between operating point motors, applying the full whack of stored energy when required. You get all the benefits of increased power when you want it, with far less chance than normal of burning out coils. It's like filling up a bucket of water from the tap, and then tipping the bucket upside down to get all the water at once!

The costs of this little device are very small, and one pack will supply a large layout (see the parts list).

CIRCUIT (See Figure 1)

The circuit is basically a voltage doubler, followed by a large storage condenser. The input is a very practical 16 volts a.c. which most power packs seem to provide, although anything from 12 to 16 volts a.c. will do. The output is about 45 volts d.c. with a very hefty current for a fraction of a second only. This output is then applied by the usual method to the point motors. You can use either the press button system (Figure 2) or the self-interrupting system (Figure 3). Almost any double coil type point motor can be operated from the OOMPH pack.

CIRCUIT DESCRIPTION (See Figure 1)

When the top 12 - 16 VAC terminal is positive, current flows via the top diode (D1) to charge the top condenser (C1), returning via L to the transformer. The bottom diode (D2) is non-conducting at this time. When the cycle changes, and the bottom 12 - 16 VAC terminal is positive, current flows via the bottom diode (D2) to charge the bottom condenser (C2). The top diode (D1) is non-conducting this time, and condenser (C1) holds its charge during this half cycle. From then on, we have two condensers in series, each charged to the peak of the 16 volt half cycle (about 25 volts) or a total of about 50 volts across the two in series. Actually, losses will reduce this to about 45 volts.

Now as C3 is sitting in parallel right across this 45 volts, it charges to the full voltage, and is ready at the press of a button (or switch) to unleash its full power into a point motor coil. The wiring circuitry of point motors usually comes with them.

The purpose of L is to limit the current from the supply in the event of overload, such as a condenser breaking down. The low 'cold' resistance of the lamp allows rapid charging of the condensers, but the lamp will quickly light up if a condenser fails to protect the transformer.

PARTS LIST

2 Diodes (minimum 2 A) @ 25¢ each	\$0.50
2 Electrolytic condensers 500 m.f. 63 PV	5.00
1 Electrolytic condensers 1000 m.f. 63 PV	2.50
1 12 V, 21 W motor car tail lamp	.50
	<hr/>
	\$8.50
	<hr/>

Hardboard - 150 x 100 mm

Plastic tubing (soft) - 100 mm x 10 - 20 mm

4 1" x 1/8" metal threads (preferably brass)

12 1/8" nuts (preferably brass)

Insulated wire

CONSTRUCTION (See Figure 4)

1 Lay all parts on the hardboard as in Figure 4, marking the positions of the holes for the plastic strap and the terminal screws.

2 Drill six 1/8" holes in the hardboard.

3 Fit the terminal screws (head underneath) using one nut at this stage on each.

4 Mount the condensers, using the plastic tubing, flattened and hole punched for this purpose.

5 Solder two short lengths of wire onto the frame and one solder terminal of the lamp, sufficient to reach the terminals C1-, and A.C. IN. This is a lot cheaper than a socket, and the wires will act as a shock absorber if you drop the unit at any time.

If it's a '21 W/6 W' lamp, just use the 21 W solder terminal.

6 Wire according to Figure 4. One end of each of the diodes can be connected to the a.c. terminal by making a half loop out of the end of the diode pigtailed. (Don't cross the wires over each other.)

Attach with a second nut.

One lamp wire is similarly connected to the other a.c. terminal.

7 Run the last nut onto each screw for external connections.

TRAPS

1 Make sure that the condensers are connected the right way; the insulated terminal is +.

2 Make sure that the diodes are wired correctly.

3 You should use a heatsink when soldering to the pigtailed of the diodes. This is usually a pair of heavy pliers clamped firmly on the body side of the pigtail, while soldering the tail end. Do not cut the pigtailed short!

4 A reversal of either diodes or condensers means new condensers! Soldering a diode without a heatsink may mean a new diode!

Now connect the IN terminals to 12 - 16 volts a.c., and the OUT terminals to your point motor circuits, and enjoy the OOMPH!

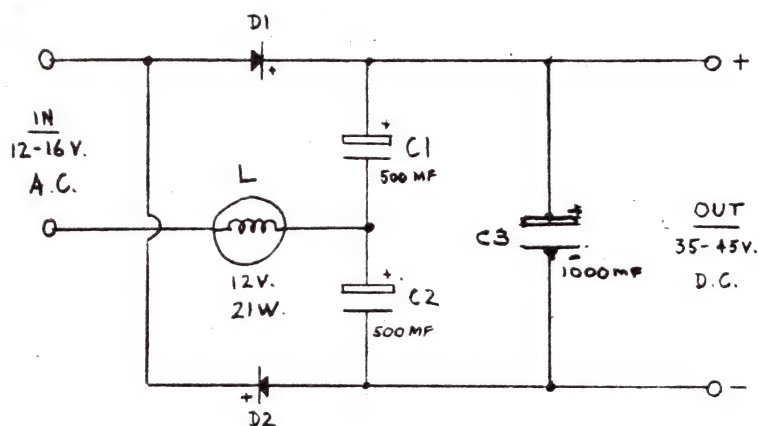


FIGURE 1

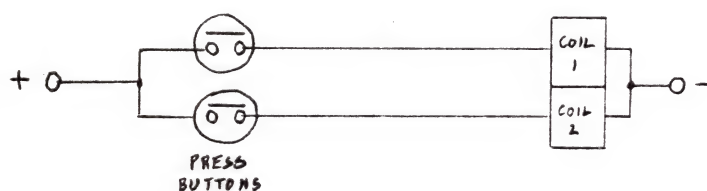


FIGURE 2

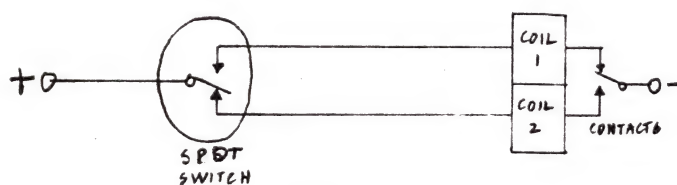


FIGURE 3

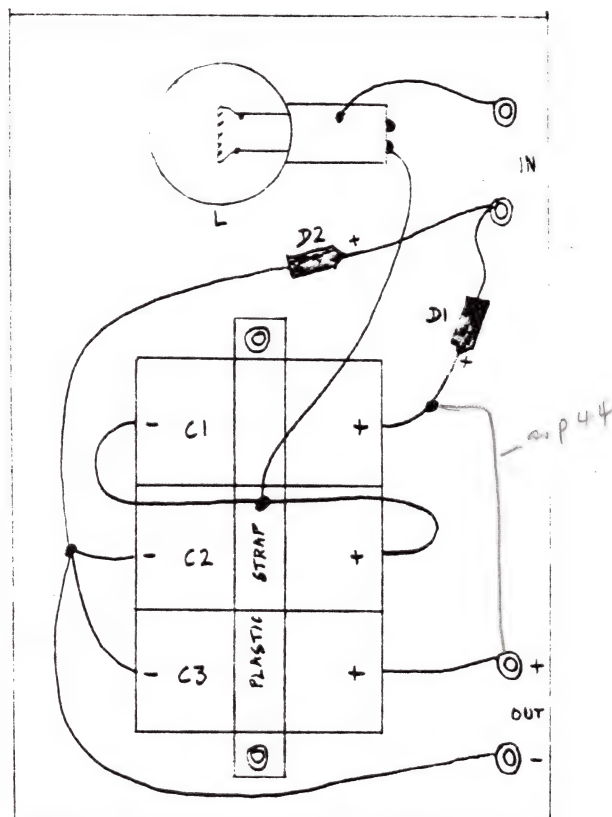


FIGURE 4

KEMILWAY SERIES 80 CHASSIS KITS

(A Preliminary Review)

by Ted Thoday

While this review will concentrate on the kit for the GWR 47XX class locomotive in EM/S4, kits are also available for the 61XX and 43XX classes.

The kits comprise a number of individual etched frets, most of which can be used on other classes of GWR locomotives; one of the benefits of the GWR program of standardised parts.

Each kit has a manual included in its purchase price. The kits are also available without the manual for those who already have one. Conversely, the manuals are available separately, and for any one thinking of upgrading his loco chassis is a must and well worth the purchase price.

This review does not cover the separate Series 80 kits and manual for 16.5 mm gauge chassis.

The Manual

There are 25 A4 size sheets to the manual, bound with card covers, with a spring binder.

Pages 1 to 4 are a description of the kits and the philosophy behind them, plus some notes on the motor options available, the equalising

system, the types of bodies available for use with the chassis, and a look to future production to cover other classes of locomotive.

Page 5 is devoted to the price list for the kits as composite units and a tabulated 'application reference' which lists each fret and its use on various GWR locomotives (12 locos are listed).

The next three pages (Sheets CK2 (61XX), CK4 (43XX) and CK10 (47XX) contain a parts list for the kit items and a list of additional parts required to complete the chassis (wheels, motor, gears and crankpin recommendations), plus an outline drawing of the loco concerned.

Sheet MA2 (1 to 3) covers the basic assembly sequence and procedures.

The remaining 16 sheets cover the making up of each individual component and its place on the chassis, with exploded drawings and text.

Comments

1 The Manual sheets recommend the use of Ultra-scale wheelsets. Kemilway inform me that, "We recommend Ultrascale because the initial design was done with Ultrascale wheels which we consider the best. They are freely available through the EMGS". They agree that Sharman or Maygib wheelsets may also be used.

2 The Manual states that there is no suitable kit available for the 47XX body. The Cotswold kit in my possession was purchased about 1978 and is not up to the high standard of most of the current white metal kits. Kemilway say that the Necast kit (ex Cotswold) is unsuitable - 'Its biggest fault lies in its footplate. The splashers/wheels clearances are incorrect'. Having compared the kit footplate with dimensioned drawings, I agree with Kemilway.

3 As received, my Manual had one sheet missing; this was supplied promptly by Kemilway at no cost to me. Due to the method of sheet identification, this was not obvious until I had worked through the sheets comparing them with the frets, etc. A 'page list' would be an asset to the Manual (Kemilway agree). I know it would add to the cost, but the Manual is so good that most people would be prepared to pay the small extra charge involved.

4 In view of the standardisation of components used in the GWR locomotive fleet, there could well be a case for issuing the 'application reference' as a separate Manual sheet instead of including it as part of the price list.

Conclusion

An excellent Manual, clearly printed, easy to read and understand. Other manufacturers please take note.

The Kit

There are 17 etched frets, various pieces of wire and strip, and an assortment of nuts, bolts, washers, pieces of tubing, etc, in this kit, packed in a plastic bag.

My first impression of 'is this all I get for my money' was quickly dispelled on opening the bag and sighting the frets. The etching is among the best I have seen.

I sat down with the kit and the Manual and worked through the instructions without doing my actual work on the kit. I would recommend this procedure before starting work on any kit, but it is a must with this one.

Comments

1 The whole concept, and this kit, have been very well thought out and designed, and should present no problems to the experienced modeller. The less experienced modeller, providing he has some experience with working with brass/nickel silver, and can solder, should have little difficulty, PROVIDING he takes his time and is careful.

2 The use of 'waste' fret to form integral assembly jigs, which are later cut away, is brilliant, and unique in my experience, and will make the trickier parts of the assembly much easier.

3 For the EM/S4 gauge modeller this kit provides an equalised chassis that will enhance the loco, providing, as it does, main frames with full rivet detail, cylinders, motion, brakes, balance weights, etc, all beautifully detailed.

4 Each of the frets is available separately, so should you damage one it is no major problem, and as a spin off, if you wish to add detail to any other suitable loco, it is a relatively simple

problem.

5 Kemilway inform me that they had intended to include, in the Manual, additional pages of hints and tips based on experience in assembling the prototypes, but so much money and time had to be spent on litigation defending their copyrights that this has not been possible. The inclusion of such additional information can only enhance the Manual.

Prices

As at August 1983.

61XX chassis kit	24.07
43XX chassis kit	24.07
47XX chassis kit	27.52

These prices include the Manual.

The Manual is available separately for 1.50, plus postage. Deduct 1.50 from the kit price if you already have a Manual and do not require a second one.

For the Australian modeller, these kits are available direct from Kemilway, PO Box 179, 12 York Way, London N1 9DB, Great Britain.

At an exchange rate of \$1 equals 0.58, and with all duty, tax, postage and cheque charges paid, these kits should cost you about \$60 for 61XX and 43XX and \$65 for 47XX, delivered to your door.

Further Reading

Model Railways magazine, August 1983 issue, pages 439 to 441, Part 1 of an article by Dave Day on construction of the 61XX chassis. To be followed in the September issue by Part 2.

TEN LAYOUT RULES

by John Thomas

I was looking through some old Model Railroaders the other day when I came across these 10 rules in the April 1946 issue. These rules had originally been published in the NMRA Bulletin for March that year, and I think that they are as relevant now as they were then.

The rules are as follows:

- 1 Have a basic motif or purpose of operation.
- 2 Operate realistically - by timetable if possible.
- 3 Choose appropriate motive power and rolling stock.
- 4 Aim for simplicity of construction and control.
- 5 Integrate scenery with track design.
- 6 Allow for future expansion.
- 7 Plan adequate operating bays.
- 8 Use large curves and adequate passing sidings.
- 9 Use grades for scenic realism and to permit more trackage.
- 10 Plan for portability to eliminate needless destruction in case removal is necessary.

Beginners and old hands alike will profit from keeping these rules in mind when building new layouts or remaking old ones.

MODELLING IN Sn3 $\frac{1}{2}$

by Steve Malone

In this column this time, Glen Wright from the Queensland Branch describes the construction of the modern aluminium wagons used in most Australian Railway systems. Although this article deals only with one type of QR coal hopper wagon built in the Sn3 $\frac{1}{2}$ scale, we are sure modellers in other scales and prototypes can benefit from Glen's notes.

QR ALUMINIUM COAL HOPPERS IN Sn3 $\frac{1}{2}$

by Glen Wright

With the vast amount of coal being transported by rail in central Queensland, and now in Brisbane also, most keen QR modellers would desire a set of aluminium coal hoppers, and with nine different designs to choose from, with a GVM of 63 to 71 tonnes, a string of these makes an impressive sight indeed, especially 12" = 1' scale. The subject of this article is the VAO aluminium bottom discharge coal hopper wagon, introduced to the QR system about 1966, built by Commonwealth Engineering, Queensland.

Construction is easier than it looks, once the hard part of establishing correct shapes of the internal peak plates and slope sheets. To start, one should obtain a QR line drawing showing side and end elevation of the subject wagon, and then go out with notebook and pen, tape measure and camera and become familiar with the wagon in question, as it does pay dividends.

It is recommended that if more than one unit is to be built, make accurate 'outside' templates to facilitate the marking and cutting out of multiple identical pieces - use 0.010" styrene.

Sheet styrene used in 0.010" for the sides only, and 0.020" for the remainder, vertical stiffeners 0.040" and horizontal external stiffeners from plastruct 1/8" x 0.050" 'U' channel.

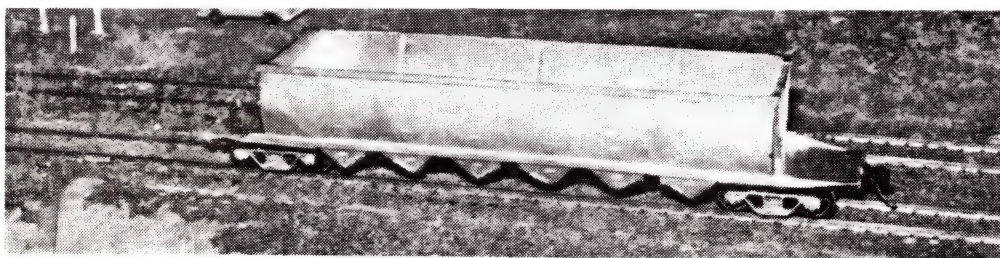
The only way to make these units is to follow the techniques of the manufacturer. Sides are carefully marked out and cut from 0.010" styrene, where suddenly it is found that the template is invaluable. The radii along the bottom, below the side stiffener, can be successfully and cleanly done using a solid punch made from the correct appropriate sized drill shank, squared off to a sharp edge and struck onto a thick, hard piece of rubber.

Using the 1/8" x 0.050" 'U' channel plastruct, remove one leg of same making it an 'L' shape instead, then liquid glue them, thickest edge upper and lowermost, to the side sheets in the appropriate positions. Glue well and weight down flat till dry.

Establish a position on the horizontal end sill sheet for the vertical end sheet (one of each, each end) of the hopper, as this is the guide to position the sides lengthways on the sill sheets, and glue the sides on the sillplates at the angle prescribed by the drawing, not indicated, but worked out by continuing the straight line prescribed from the top of the five internal peak plates to the bottom of the hopper, as viewed on the end elevation of the drawing. Continue these lines down under the hopper to where they intersect, and there is your angle. (For more than one unit, I advise a gluing jig.)

Glue the sides to the end sills, let dry, then fit the five internal peak plates. If your measurements are accurate, they will fit in just as the drawing shows, all the same top height (don't get caught - two at 72° and three at 64°, with bulkhead panels and stiffeners on top). When glued in, these form the entire bottom of the wagon (less doors) and hold the angles portion of the bottom in position, with the longitudinal sides straight. Hence the need for a template to make multiple identical parts, as if one of the peak plates is too narrow, the wagon will have curved sides when viewed from above.

When dry, the wagon sides can be curved, cold, quit easily, and held in position against the vertical end plates and the three internal bulkhead panels, using small wire spring clips (home made). Apply glue to vertical end plates, side panels join ONLY and position on a level surface, upside down, supported each end only, and allow to set. Now is the time to remove any longitudinal twist which may occur at this point. When dry, clamp at the three bulkhead panels and glue, top edges should be now straight and sides neatly curved into position. Fit two end slope sheets into place at 40°, fit buffer beams and framing under end sills, hammer striking pads on sides, pressure pak all over with silver paint. Fit draft gear (Kadees), bogies, door release mechanisms, and braking equipment detail and road numbers and viola, a strong (try twisting the thing), good looking wagon, add real coal and its complete. Happy mining.



2 A completed wagon. This is the first one made and Glen has been able to improve on later wagons as experience and confidence grows.



This photo shows two wagons nearing completion; also seen here is the templates mentioned in the article, plus a completed bogie, the silicone moulds used to cast them in, using a lead/typemetal combination which gives good results.

A MEMBER VERSUS "THE TRADE"

In view of the, up to now, rather one-sided arguments presented with regard to pricing of imported model railway equipment in Australia, it was decided, following the letter from Mr Kehoe, to invite comment from 'the Trade' - from people actively engaged in the import business, not directly connected with or members of the AMRA, and who would not normally be able to comment on the statements made by Mr Kehoe and others who have written along similar lines.

Four replies are printed in full, plus a pertinent extract from one received from the Model Dockyard.

It would appear that many people are unaware of many costs, restrictions and requirements under Government Regulations imposed on the 'Trade', as opposed to the individual buyer, apart from the fact that it is necessary for the wholesaler and retailer to make some profit in order to remain in business.

It is also interesting to note that Australians are not the only ones affected by high 'mark-ups' - a paragraph in an article in the November 1983 Railroad Model Craftsman (Page 128), points out that prices in Montreal, Canada, are frequently 100% to 200% above advertised US prices.

It is hoped that the following may help to clear up some of the contentious points raised.

The columns of 'Pop Valve' will be open in Issue 159 to receive comments by members; later correspondence will be judged on merit, but Journal is not prepared to devote unlimited space to a subject that can probably only be resolved by 'buyer resistance', which, in turn, if carried to extremes,

could cause a further reduction in the already diminishing number of 'hobby shops'.

For those interested, the following information was gathered and received in the period mid-July to mid-October 1983.

Mr Norm Read
3 Augusta Street
STRATHFIELD NSW 2135
Dear Norm

Thank you for your letter of the 14th, which arrived today.

Whilst I am delighted that you intend to publish in Journal a private letter written to you, and then invite the trade to comment on that letter, I feel sure that, after reading it, you will want to withhold that letter and publish this one instead, a tome which is, I assure you, considerably more detailed and to the point. You may then be inclined to invite the trade to defend itself rather than merely comment.

And, as for comments from the trade satisfying me or otherwise, facts are of far greater value because it is facts which, generally, avoid the very real dangers that fatuous and foolish comments can bring with them.

Let me preface my facts with a fact ... I almost bought, last year, the (at that time) major model railway outlet in Perth. Naturally my accountant and I went into the practices of the business thoroughly, an exercise which has left me with, perhaps, some information not generally

known. The only reason I did not buy the business was a purely business decision based on the goodwill component. However

Let us use, as the example for this exercise, the Hornby rtr loco code R062, BR, 2-6-4T. This is a fairly standard loco found on virtually any LMS or BR steam era layout. We shall assume a fictional Australian business buyer, either wholesaler or retailer or both, but not the ordinary 'man-in-the-street'. The figures quoted shall be for a 'one off' model, but I must point out that discounting is common for multiple orders.

The currency conversion factor is the approximate current exchange rate of 0.5757 pence per \$1.

The full UK retail price quoted is as advertised in the June model press by both Hattons of Liverpool and Kittle Hobbies, and bears little relationship to the reduced price one can actually obtain the item for from, say, a major discounter such as Railmail.

Full UK price	£ 17.95	\$31.18
Less VAT @ 3/23rds	£ 2.34	\$4.07
Therefore actual full UK retail price	£ 15.61	\$27.11
Less retail mark up at, say, 33%	£ 5.15	\$8.95
Therefore actual wholesale UK price	£ 10.46	\$18.16

At the point one should deduct a further, say, 25% in order to arrive at the manufacturer's overseas price, almost certainly that at which it would be offered to the UK wholesalers. However, to avoid the smug comment from someone that I haven't allowed for any discounting which has taken place, I'll leave it at the above figure, as though our imaginary Australian businessman was buying from a UK wholesaler ... clear?

Therefore price landed in Australia	£ 10.46	\$18.16
Customs duty @ 30%	£ 3.14	\$5.45
Therefore total landed price	£ 13.60	\$23.61
Sales tax @ 20%	£ 2.72	\$4.72
Therefore total price prior to selling	£ 16.32	\$28.33

You will observe that sales tax, even for the retailer, is added on at this point ... not after the mark up. Of course the retailer (or our fictional character) doesn't pay the sales tax, he holds an exemption number and merely passes the amount on to the customer to pay, then he pays it to the taxation department. Of course, he doesn't pay to them the interest he has earned on the money he didn't pay in sales tax in the first place ... but that's another story. Still with me? Good. Oh, in the private letter I sent you I added the sales tax after the 'shelf price' and deliberately gave you an incorrect figure. You missed it, or perhaps I wasn't too clear. Never mind, let's press on ...

So, an item which left the UK with a declared value of £ 10.46, or \$18.16, attracts a total of customs duty and sales tax of a mere \$10.17.

The total cost of the item prior to shelf price is, therefore, \$28.33.

The customs/tax component of which is \$10.17

or some 64% of the total.

Does anything about that percentage figure ring a bell?

If we now add postage to our single item (no, I hadn't forgotten!) of, say, \$5 surface mail, we arrive at a grand total \$33.54.

The current price in Perth is \$138.15. or, at discount, \$124.35.

The difference, at the lower price, is \$90.81.

Yes, I know, the normal practice is for the wholesaler here to slap his gross amount on, and then the retailer has his share and so on. The question is ... why? Who is the bogey? The wholesaler? The retailer? Both? It certainly isn't, for once, the government!

But is is the perpetuation of the myth that it is the government, fired by such ill considered fantasies as your line in the March/April Journal that: "Some 60% of the price one pays for imported lines in the hobby shops represents duty and sales tax ..." that enables the present rip off to roar on unchecked.

Let me differentiate between the amount paid in duties by the trade and that paid by the rest of us. Certainly 60% plus is too much on the full UK or USA price, and the FEDCOM of AMRA has been, and continues to be, lax in not constantly pressing for a reduction or a more equitable levy.

Try again, Norm ... try again.

Paul Kehoe

A Scott and Co (Wholesale) Pty Ltd
15 Creswell Street
NEWSTEAD BRISBANE Qld 4006

Fed Secretary
AMRA
Mr Norman Read
3 Augusta Street
STRATHFIELD NSW 2135
Dear Sir

We are in receipt of your letter dated 18 August and thank you for enclosing a copy of the letter from Mr Paul Kehoe and the opportunity to comment on the content of Mr Kehoe's letter.

In his letter, Mr Kehoe has chosen a Hornby R062 locomotive as an example for his pricing exercise and we compliment him on his choice of product. We are not familiar with all of Mr Kehoe's alleged sources of information, however, as Australian agents for Hornby Model Railways we are in a position to supply the correct pricing structure applicable in this instance.

Although Mr Kehoe's starting price for the item concerned must be based on information in his possession which we cannot confirm, the resultant UK wholesale price listed by him is in actual fact much less than the export price available to Australian importers from the manufacturers, Hornby Hobbies. This initial discrepancy in Mr Kehoe's exercise, approximately 50%, tends to snowball when his other incorrect calculations are applied - particularly in relation to Sales Tax.

The value of a product for sales tax is based on the wholesaler's selling price or the equivalent. This wholesale price includes the original manufacturer's cost, freight and shipping costs, landing charges, customs duty, customs clearing agency costs and the wholesaler's operating margin. In the event that a retailer imports an item directly, the sales tax is paid in conjunction with customs duty and in this instance the value for Sales Tax is calculated by the Customs Department on the following basis - value for customs duty PLUS customs duty PLUS an amount equivalent to a wholesale margin. Thereby making the value for sales tax equivalent to the wholesale price.

To offer a simple explanation of the pricing structure applicable to hobby products imported into Australia from the UK and in particular Hornby products, we feel it would be easier to refer to percentages of the actual retail selling price. The following is a calculation, to the nearest whole per cent, of the break up involved expressed in percentages of the retail selling price.

Supplier/Manufacturer	23%
Agent (including advertising and publications)	2%
Freight/Shipping Costs/Customs Clearance	
Costs/Insurance	4%
Wholesaler's/Importer's margin	18%
Retailer's margin	33%
Australian Government	
(Customs Duty/Sales Tax)	18%
	<hr/>
	100%

It should be noted that the Wholesaler's/Importer's margin provides for warehousing facilities which cater for bulk stocks to be stored until required by retailers, then repackaging into quantities suitable for retailers and despatch costs. The margin for the retailer needs to be adequate to cover all operational costs associated with a retail business and an acceptable amount of profit for the retailer. Both wholesalers and retailers of hobby products provide employment for Australians in a field where there is a very limited local manufacture.

The system of supply through importers/wholesalers to retail outlets enables depth of range and variety of products to be made available to the general public. There may be instances where individuals can purchase items from overseas suppliers for less than they would pay at a local retail shop. However, the same individuals would expect that the local retail shop (and the wholesalers supplying that shop) continues to maintain a range of products, which are not available or not economically viable to import directly, for purchase at their convenience.

Procedures we have so far outlined are the normal general trading procedures adopted in Australia. There may be retail dealers who bypass the normal importer/wholesaler channels to import items from overseas suppliers of wholesalers. We have no first hand knowledge of such transactions and consider some of the figures and circumstances

quoted by Mr Kehoe, particularly in reference to sales tax, as quite extraordinary. In the event that Mr Kehoe is able to produce evidence that sales tax is being calculated on amounts far less than the 'wholesaler' price (or equivalent) or that sales tax collected by holders of Sales Tax Certificates is being withheld, before being remitted to the Government, to accumulate interest, we believe that such information would be of great interest to the Australian Taxation Department. As most wholesaler-retailer transactions involve 30-day trading accounts, the wholesaler has normally remitted sales tax to the Government before the actual payment is received from the retailer.

Hoping that some of the details contained herein may be of general interest to members of your Association, we will permit this letter to be published in your Journal, provided that, our letter is reproduced in entirety without deletions, abbreviations or any other alterations.

Once again, we thank you for the opportunity to express our comments and wish you every success with your publication.

Yours sincerely
Jim Hinchliffe
MANAGER

Southern Model Supplies Pty Ltd
63 Boothby Street
PANORAMA SA

Managing Editor
AMRA
Journal

Firstly let me say that Southern Model Supplies has been deeply involved in the importation and distribution of model railways for over 25 years and I believe that we have gained some knowledge in that time of the costing of model railways from the design stage right through the distribution chain to the final place on the retailers' shelves.

I do not wish to go into details of the duty, freight, sales tax argument as this becomes a complex exercise, however I do wish to soundly refute the inuendo that the TRADE is making excess profits at the expense of the modeller.

The manufacture, importation, distribution of model railways is a highly competitive business which shows a low return for investment because of his tooling costs for a low volume industry and because of the large stockholdings necessary to cover the wide range of accessories and spares necessary to support the modeller and his needs.

There are many retailers and wholesalers who have gone out of business in recent years who would confirm these comments.

As the Australian agent for Lima, I am proud of our Company's contribution to the Australian modeller in recent years. There are now 25 Australian models which have involved complete new tools and 10 models which have involved minor alteration to tools. Considering the size of our market and the fact that the same investment in tools for European models would return 10 fold to the

manufacturer there is no doubt that both Southern Model and Lima have fully supported the local modeller who now has excellent models at excellent prices.

The TRADE is made up of manufacturers, importers, wholesalers and retailers. Without the trade there is no track, no locos, no rolling stock, in fact no hobby, so those persons who set out to destroy any part of the trade are in fact destroying the very hobby that they pretend to support.

Yours faithfully
R G Thompson
MANAGING DIRECTOR

The Fantastic Hobbyshop
34 Angel Arcade
Ash Street
SYDNEY NSW 2000

AMRA
Journal

Would it be helpful to know that your retailers margin is about 30% of the retail price? Prepaid duty and sales tax are part of the cost to a retailer, and he adds his margin to that cost. Sometimes, in countries overseas, purchase tax or VAT is added to the retail price and it becomes an additional charge - and it is not part of a retailers cost price.

Out of this 30% a retailer pays for - wages, rent, insurance, electricity, phone, bankcard fees, interest, bank fees, federal and state duties such as stamp duty, payroll tax, business registration fees, cleaning costs, wrapping, depreciation, maintenance and replacement of carpets, fittings, machines, rates, leasing equipment and company tax. He must allow for soilage, depreciation, theft (shop stealing), mistakes in buying (mark-downs) and somehow pay continually increasing prices to replace stock sold. If there is anything left it is called Nett Profit, and the Government takes income tax out of nett profit. So if your local hobbyshop proprietor takes home just 3¢ in the dollar of retail sales, he is fortunate. To make an income of \$250 per week, he has to sell \$433 300 worth of goods every year.

The costs of a wholesaler include most of the above, plus bad debts, plus freight, etc. The risks he takes are greater, because of the increased quantities and values involved. Importing is very risky. Damage and pilferage are great. Importers' money is tied up for months waiting for shipping. Strikes, bans and government regulations all have cost effects. In the UK for example the factory is just down the road. Not only saving on the huge distances in this country, but eliminating sea transport. Workers in UK have lower wages, penalty rates are lower, and fringe benefits such as 17.5% added to annual leave do not exist.

Now there is a temptation for individuals to import for themselves. They don't pay duty, sales tax or VAT in the overseas country, and may try to avoid duty and sales tax in Australia by

importing as a 'gift' or under stating the value. These people are usually unaware of the fines involved if caught. They are hefty. For a private individual summonsed to a Court of Summary Jurisdiction by the Customs Department, it can involve a fine of up to \$5000, plus forfeiture of the goods. For a business, its just not worth it, in the High Court the fines are WITHOUT UPPER LIMIT.

If you are guilty of examining goods in your local hobbyshop, and then ordering those goods from overseas, you are sponging on your fellow modellers who are paying retail. They are paying the costs for you. Similarly, if you buy spares here for goods that you got overseas, you are cheating again. It costs your retailer more than he can charge to serve you with spares. Crudely, undermining your local hobby shop is a bit like fouling your own nest. You don't save that much, and it stinks.

The only way to decrease margins and prices in Australia is to increase the number of items sold. That's why so many clubs such as AMRA run exhibitions, more modellers, more sales, lower prices, greater range available. Every time you buy here, you are helping to increase local volume and keep prices down. Overseas there are greater numbers of people buying the goods, spreading the costs, and frankly there isn't another country in the world where you have a choice as wide as your Aussie Hobbyshop.

John deHorne

Australian Model Craft Co
Box 118 PD
ALBURY NSW 2640

AMRA
Journal

As the oldest member of the Model Railway Trade in Australia, I am honoured that you would call on me to offer comment concerning pricing policies of and for model railway equipment in Australia.

The price of a 500 g tub of margarine at my corner store is \$1.45, whereas I can buy same at one or other of the supermarkets at 85¢ any day of the week. Why is this? A letter posted to my next door neighbour costs 27¢ and yet in some other countries the cost is less than half of this - how can that happen? Why do we have punitive provisions of the Trade Practices Act which require a trader to have goods in a condition suitable for the purpose for which he bought them - such as a running loco, compared with a non-running one - and fix it up if it doesn't - and to maintain to the best of his ability a range of spare parts, and when the loco is withdrawn or altered, he is left with a cartload of spare parts which are now obsolete. Or why should we have electricity regulations that require a transformer to be capable of being struck by lightning while immersed in a bucket of water and still work? All these things are an attempt by the authorities to provide safeguards for the Australian consumer - so somebody

has to pay for the cost of these things - and guess who that is going to be?

It is impossible to compare the price of anything in Australia with a price overseas, where they work for next to nothing - have a small country - with a density of population many times our own (and goods have to be got around Australia). Many modellers are still bemoaning their fate that they lost their money altogether, or had to wait 12 months for some comparatively simple item. All that glitters isn't gold - as the saying goes. Any modeller fails to cost into an item his time (say at \$15 per hour) writing out an order, interest which he would have been paid on money outlaid while he is waiting to receive goods, writing to his supplier complaining the loco (or etc) got smashed up in the mails, or didn't run, or etc -

which of course, if he took time off work and did it, he would have to do. And remember anything which is not bought in Australia, puts somebody's job at risk, and will eventually lead to a collapse of Australia, and its way of life, because taxes to support the unemployed will become so great.

We have been in business for 34 years, and we reckon we sell goods at the lowest figure we can, commensurate with good management and obeying the law, and providing margins, sufficient to cover overheads of ourselves and retailers, 20% sales tax and so forth, and providing sufficient profit to at least return wages to a working proprietor and a reasonable return on capital outlaid. We've put back half our profit over 30 years into the Associations, advertising and free give-away information sheets and Newsletters - and I venture to suggest that the trade would be very much smaller or non-existent today, if we had not done so. I could go on, as to why we need more margin, that somebody who is a day away from his supplier - whereas we are 10-12 weeks - of 30% import duty which sometimes becomes very much more under Customs rulings, and so on. You don't see hobby shop proprietors driving around in Mercedes, BMWs or Rolls Royces, which inferences of excessive profit would infer. More often than not there is a fairly big turnover in shops and shop proprietors, which infers unforeseen difficulties that are not apparent on the surface.

BILL GARDNER.

EXTRACTS FROM COMMENTS BY -
THE MODEL DOCKYARD PTY LTD, MELBOURNE

For your guidance, importing/stockists such as our Company are not free to indent Hornby onto the Australian market. The Sole Agent and Importer being Messrs A Scott and Co Pty Ltd, 15 Creswell Street, Newstead, Queensland, 4006, to whom we suggest you refer this claim for comment.

It is not for us to conjecture as to what their reply may be, but undoubtedly with such an important line, having wide acceptance through a large number of different types of outlet (department stores, hobby stores, toy outlets, etc), their pricing mark up would not only have to show them a reasonable return, but make provision for a fair

percentage to wholesalers in each State, as well as the retailers margin. With 20% Sales Tax coming on top of the price to the retailer. Plus some provision for inland transport charges.

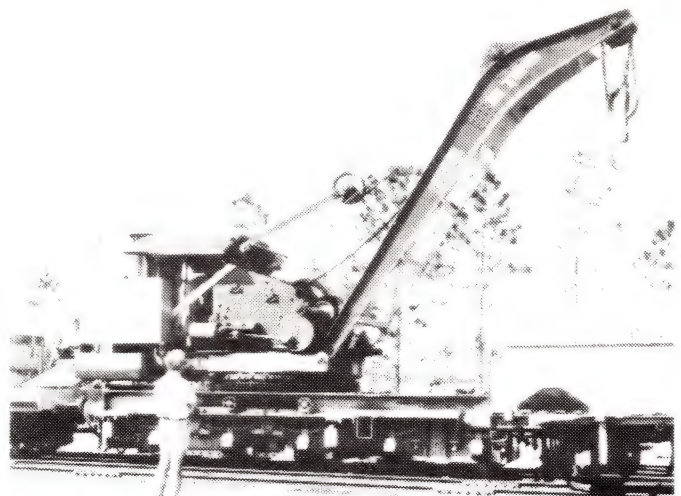
I might add that where the UK market is concerned and the distances are not as great as in this country, firms such as Hornby distribute their merchandise directly to the shops and can therefore function without the participation of wholesale houses. With consequent reductions in the necessary price structure. Something which would be impossible on this market, where most outlets are entirely dependant on their local wholesaler.

Where such lines are concerned, our costing staff are fully in accord with Journal comment that some 60% of the final price can be made up of costs. To itemise some -

- . Bank interest charge on terms of letter of credit.
- . Ocean freight.
- . Insurance
- . Shipping agent's charges (delivery to docks, documentation, etc)
- . Duty
- . Clearing agent's charges (delivery from docks, supervision, handling documentation. Lodging claims for any pillage and/or damage in transit)
- . Distributor's costs (including allowance for inland freight to wholesalers in each State)
- . Sales Tax on price to retailers

One could write a book on the subject, but surely it must be obvious to Mr Kehoe that if Hornby was being unfairly disadvantaged on the Australian market, then the Principals in England would quickly act to make other arrangements.

Peter W Duckett
MANAGING DIRECTOR



QR steam crane, now owned
by the ARHS Queensland
Division

MODELLING IN S_n3¹/₂

170

VAO/VAOG/VAOS (HOPPER) WAGONS

Description: Eight-wheeled Aluminium Bottom Discharge Coal Hopper Wagon, suitable for *Express Freight and Goods trains, Aluminium Construction, Roller Bearings.

Average tare14.4 to 15.2 tonnes

Gross massVAOS and VAOG—63 (less on B class lines), •71 tonnes

Inside Imperial Length 34'0" Width 8'9¼"
dimensions Metric (mm) Length 10 360 Width 2 675

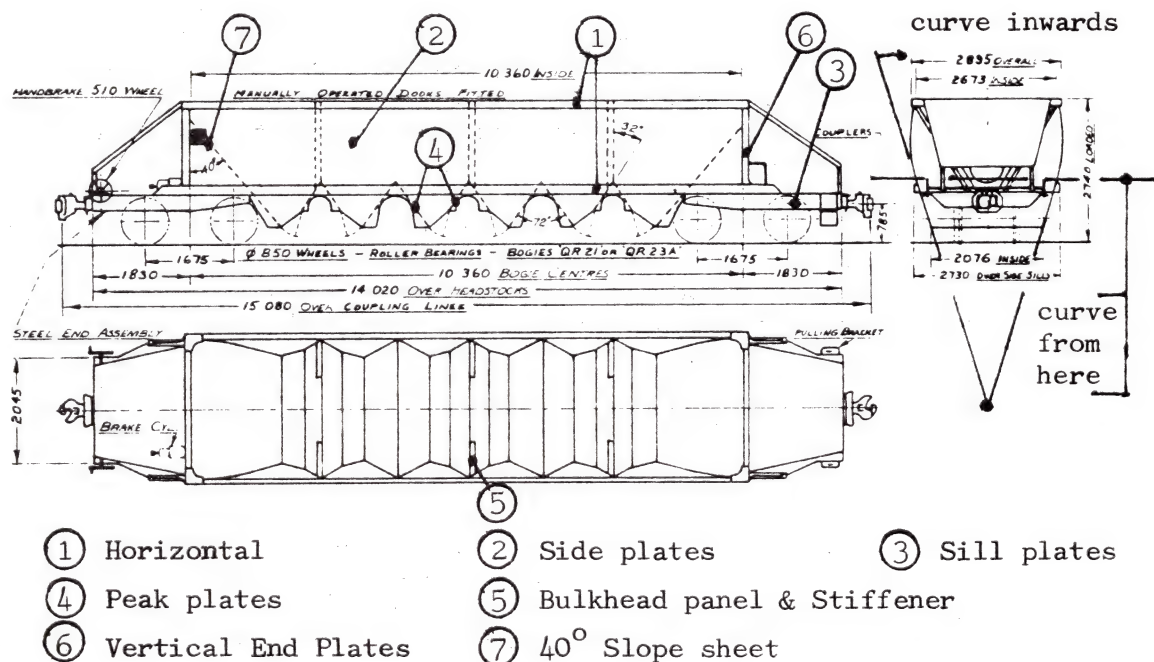
Cubic capacity(level) 52.2 cubic metres

Unit length 3.1

Drawgear class D1

No. in traffic731 VAO, 61 VAOG, 30 VAOS

Remarks: *May be attached to Express Freight trains when empty. Restricted to Goods trains speeds when loaded. (See restrictions in "Supplement to Working Time Tables".) •S class lines and some A class lines nominated in "Supplement to Working Time Tables". Some VAO wagons reclassified VAOG when fitted with tarpaulins and supports for grain traffic. Some VAO wagons reclassified VAOS when fitted with canopy and tarpaulins for sugar traffic.



(These notes are drawn on a page from the Q.R. Rolling Stock Book, available from the A.R.H.S., Qld. Division.)

ERRATUM:

This sheet should have followed sheet 24.



FROM THE MAILBOX

Editor

AMRA Journal

Dear Rex

As one who believes that AMRA is on about trains, friendship and good fellowship - a notion that is reinforced every time I attend one of our Branch meetings - I have started to get the idea of late that our Journal must belong to some other organisation. It certainly seems that to get anywhere in 'Pop Valve' a contributor needs to have been entranced by some of the more undesirable aspects of the 18th Century literary tradition or the intellectual inebriation of a first year university arts student. As in total war, the first casualties of this 'intellectual ten eighty' are the innocent and truth.

I had thought at first that our Managing Editor was compensating for the fact that the Romans had built Hadrian's Wall to keep the Scotch from beating the living daylights out of their less effectual neighbours. More recently my suspicions turned towards the possibility that he was operating a vanity press for the benefit of either a frustrated writer or the Ancient Mariner himself. There have been published prodigious outpourings that surely must be a team effort - it is unbelievable that any one individual of right mind could create such a prolific volume of continuous much-ado about nothing as has crammed these columns of late, always supposing we can call so much 'old hat' nothing.

However, I had felt secure in the belief that if a vanity press did indeed exist for the need of the phantom-penpersons - supposing that the plural does exist - Gordon would have doubtless arranged collection of appropriate fees. Alas, this would appear to be not so; we have been charged subscription again this year when I'd expected we'd achieve a dividend. Either Gordon has erred by granting over-liberal credit to the vanity writers, or there has been no proof of action behind their protestations. On the other hand, he may have been smiling benevolently on less fortunate beings - commendable in its way, though, like kindness to the afflicted of Allah.

Phantoms are probably akin to ghosts. This recalls a literary instance, not necessarily of a ghost, but the similarly unlikely character of a reincarnated journalist called Archie. Archie, it seems, was returned as a cockroach to the place where he spent his previous working life. Here he regaled his old boss with the day to day doings of a promiscuous lady cat, by jumping on the keys of a typewriter at the dead of night.

It seems, too, that both Archie and the Ancient Mariner had in common, each in his own way, a need of recognition. Fortunately Archie wasn't a bore, but we can only conjecture as to why he was returned to his old work place as a lesser being. One thing for sure, both characters seem unhappy and

in need of help.

Both Archie and the Ancient Mariner do go on and protest in their individual ways, and this does suggest that the extra-articulate can be as much bullies as the most muscle-bound morons. Like toy trains, writing in moderation is a healthy pastime and should be kept as such. If vanity privileges have been extended to some, it is believed that it is high time Gordon caused the account to be balanced, and advise his 'clients' that it is more fitting that their future therapy be obtained from a professional in a more appropriate environment elsewhere.

Sincerely
Frank Sheeran

The Editor

AMRA Journal

Dear Sir

The problems associated with a chipboard baseboard outlined by Editor Rex Little in the September/October Journal, I too experienced on my layout in Ballina, where, due to the excessive moisture in the air in the wet season, I had a 9 foot chipboard grow $\frac{1}{2}$ " in length over three years. If it swells, it can never shrink back during the hotter dry weather to the original size, on account of it having been manufactured under heavy pressure.

Whenever using any composition board, it should always be sealed completely with an undercoat or similar before being assembled on a layout. I personally, after my experience with chipboard, have used $\frac{1}{2}$ " ply, completely sealed first on my new layout and it most certainly has not moved. I also found it possible in building each module to use the ply as trackbed in strips only 4" wide leaving the scenery, when completed, to extend to each side of the module. Building in this manner is extremely economical having used six sheets of 7" x 4" $\frac{1}{2}$ " ply in 200 feet of benchwork.

Yours faithfully
Laurie Woods
Queensland

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Reference the letter from Mr Woods (above), while plywood is certainly a good material for baseboard and trackbed construction, it does tend to curl and twist more than chipboard unless well restrained and is also usually more expensive (may be Queensland is cheaper!). Another advantage, perhaps not so well known, is that it does not wear your tools as fast as chip or particle board does, due to its somewhat abrasive nature.

All baseboards and trackbed, particularly in very humid areas, SHOULD be completely sealed, particularly on the edges. A good sealer is 'white

Polish', which is really only shellac varnish; it dries quickly and can be bought ready-mixed or 'mix it yourself'!!

For information and some comparison, average prices in Melbourne (December 1983) are as follows:

Standard Plywood	8' x 4' x 1/2"	\$43-\$44 sheet (Pine 1)
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Structural Ply	8' x 4' x 1/2"	\$25-\$26 sheet (one side good, other rough)
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Standard Particle Board	8' x 4' x 1/2"	\$20-\$21 sheet
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'Custom Wood' - a dense quality particle board marketed by Laminex Pty Ltd	8' x 4' x 1/2"	\$23-\$24 sheet
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Discount priced material or 'seconds' may be available in some areas'.

Gordon Duncan

Managing Editor

AMRA Journal

Dear Gordon

Permit me, as one who first contributed to Journal during the 1950s and who has enjoyed reading this publication for something like 30 years, to congratulate you on the excellence of the issue for November/December 1983 - Volume 32, No 157.

It included a first class cover picture, eight (yes, eight) first class articles of widespread interest, an excellent technical article, with quality drawings and clear photographs dealing with a popular prototype locomotive, 16 (yes, a full 16) pages of Branch Notes - all of which should be compulsory reading for ALL members of the Association - plus several snippets of valuable information or constructional hints. That issue, in my view, must be one of the best ever distributed to members in the long and distinguished history of the Association's very own publication.

Congratulations!

Yours sincerely

Neil R Riches

Victoria

AN APOLOGY

It is regretted that Mr F Peck, of Merrylands, NSW, was not acknowledged as the donor of the article 'Runaway Engine on the Main Line', published in Journal No 157.

Mr Peck also went to considerable trouble to obtain permission to reprint from two sources.

TRADE NOTES

Noticed recently some nice road transport vehicles by Herpa and some excellent earth-moving equipment by Roco at The Engine Shed, Box Hill, Victoria.

F&G Models of Box 149, Kilsyth, Victoria, has a large range of accessory items in metal, including tree 'skeletons', at reasonable prices, and there is a rumour that there may be a new release by the time the Victorian Annual Exhibition comes up.

Trainworld of East Brighton, Victoria, is loaded with Athearn rolling stock, more new books 'than you can poke a stick at', Dremel accessories at better prices than I've seen elsewhere and a good selection of other MR equipment in N, HO and O.

Fybren Models (Hobbycraft) of Kew, Victoria, advise that they will not be producing any more N gauge Australian kits due to the poor response, but they have been appointed sole Australian agents for the following:

TTK Road Transport Kits - cars, vans, heavy trucks, buses and transfers

Dart Castings - mainly OO/HO scale, but some N items are available

J&M Model Railways - truck and back-to-back gauges,

turned brass fittings, buffers, etc

British prototype modellers will probably be aware of these manufacturers and the quality of their products.

Hobbycraft has good stocks on hand of Cooper Craft kits, Graham Farish, Mike's Models, Slaters materials and accessories, 'etched brass bits', tools and miscellaneous MR requirements.

'THE AUSTRALIAN RAILWAY PHOTOGRAPHER' magazine project that was mentioned and advertised in Journal last year has, unfortunately, struck a number of unforeseen 'snags', and we have been advised that production is unlikely in the near future. The project has not been abandoned, but it appears that promised 'sponsorship' and advertising necessary to finance the project has not been forthcoming, possibly due to the present uneasy economic situation.

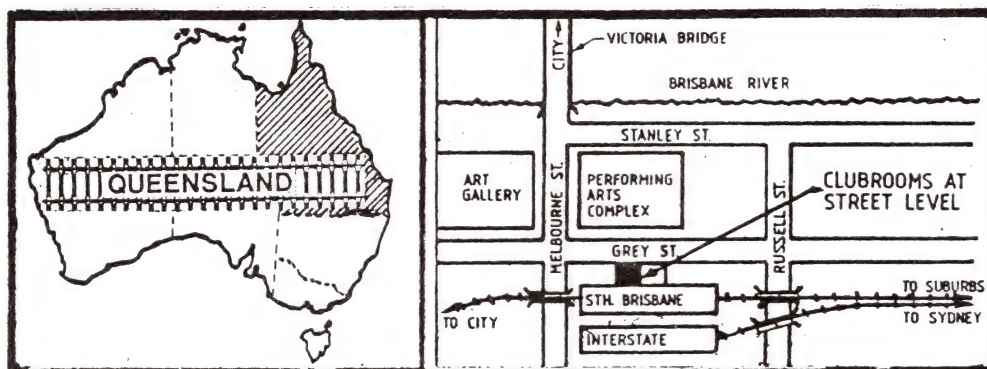
NOTE:

If other readers and/or dealers care to advise Journal about new and/or interesting items, they will be passed on for the information of all. The writer can't get round everywhere!

STATE



NEWS



Recently in the Clubrooms a major attempt has been made to finish most of the scenery on the Clubroom system. Good attendance was received for the organised scenery work days, and those who took part were rewarded by some tasty treats prepared by Marie Hill and other ladies of the Branch.

John Hill has changed and improved his scenery techniques somewhat recently, and those who haven't been in for a while are advised to drop in and check it out.

Although most of the scenery is progressing very well, if you want a part in it, step forward now and you can help in some way in the scenery detailing or building construction and may be learn something as well.

Other news includes that Charlie Dearling has been transferred to the ACT area and he will no longer be in the Branch sometime in February. We wish him the best in his new position. Charlie has been a very active member at exhibitions and the Clubrooms over the past few years, and we thank him for his support. We would also like to thank him for his gift to the Branch of a mirrored photograph of an American Narrow Gauge Train.

Our Branch Exhibition is coming up again - this year's Labour Day weekend is 5, 6 and 7 May. Many new layouts have been promised, and there will certainly be no shortage of Australian HO layouts this year it seems. A new concept in modelling not seen at Brisbane exhibitions before is being presented by a young member of the Branch - Chris Malone. His On2 or O-16.5 mm layout modelling the cane tramways of Queensland is under construction.

For the first time in many years, the admission charge for the show is to increase from \$1 to \$1.50 for adults, while children remain the same at 50¢.

The mid-week, midday meeting for retired members continues to be popular and is conducted by Ken Innes.

Our 'third Saturday' running day continues to be highly successful, with a large range of scales and prototypes being operated. Those who call us an 'exclusive mob of scratchbuilders' should

attend these events and just see what goes on. From bullet trains to shays and climaxes, it's all a goer.

Our monthly meetings (4th Thursday) still receive good attendances. At our October meeting a large selection of slides of varied topics was screened by Steve Malone, mainly from his recent southern trip. Our November meeting had a talk by Warring Geddes of Model Railway Electrics where he related wiring to plumbing. A real 'back to basics' talk which proved informative to all. We plan to continue these electrical talks, maybe eventually winding up to a controller project for members. Also, a scratchbuilding project for all to take part in is being planned. The item under construction would be a four-wheel small NSW brake van. A simple item, yet interesting for any modeller. Speak up if you want to take part.

Speaking of controllers, Peter Sanderson from Ballina, NSW (many consider him as a Queensland member), dropped in recently and displayed some of his recent projects. These were some various types of controllers, using the famous Cec Wall throttle circuit. One was a scale model of the NSW 44 Class controls using pressure pak and olive oil cans for major assemblies. Another was a tram (electric) controller, also well built and enjoyable and interesting to operate. Also on the drawing board, Peter has a steam loco controller approximately 1/10th full size.

The Union Pacific Model Railway Club in Brisbane invited other model railway clubs to their Christmas breakup - film evening. Five attended from AMRA Queensland Branch, and modellers from Hornby Collectors, N Gauge Club and All Gauge Club were there. One hour of films were screened; the first was on Shays, Climaxes and Heislors in service in America on various railways. The film was the best I've seen on this type of loco, many close-ups of the unusual parts of these geared locos made it easy to understand their operation. Other films screened that night included a detailed study of the NYC Hudsons and a railfan tour on a Norfolk and Western streamlined J class.

After the films, supper was provided and the

large club HO layout was available for close inspection. The layout has been in the process of construction for over 10 years, and is now almost complete. A good night's outing.

THE QUEENSLAND BRANCH CAMP

The Branch Camp at The Border Loop recently proved to be the most successful and enjoyable camp so far, with around 35 members and families taking part, arriving in 16 or so cars, and those staying overnight using 12 tents. The weather was good to us and the swimming hole in Gradys Creek was popular. There were many more trains than usual and many ladies enjoyed taking part in train spotting, as well as bush walking and touring through the lush rain forests. Of special interest on that weekend were the special wooden passenger trains for the Railway Picnic and the ARHS special to Casino. Also, this weekend was the last time the Brisbane Limited was to run in 'normal' times. The Limited now arrives and departs three hours later which prevents morning

and afternoon photographs to be taken of this train.

Rodney and Cheryl James of Grafton, Don and Laurie Warr from Landsborough and Al Morgan from Cooinya were some of the country members who took part. Members who just came down for the day included Bert Batch, Ken Innes, Paul Robinson and family, Neil Johnman and Julie and Laurie and Barbara Woods. Neil Johnman was horrified to see two members chasing his wife to be, Julie, trying to convince her to take a dip in the cool mountain stream - these two members could be described as a young son of the Secretary and a not so young QR Station Master and Cattle inspector (going by the hat size). Fortunately Julie headed down a stony road which slowed her barefoot pursuers somewhat. AMRA Queensland Branch took up half of the camping area, and one wonders what the other campers thought of our antics whenever a train went through. The night time camp fire stories came thick and fast, and some felt they might die laughing. All in all, a most enjoyable weekend.



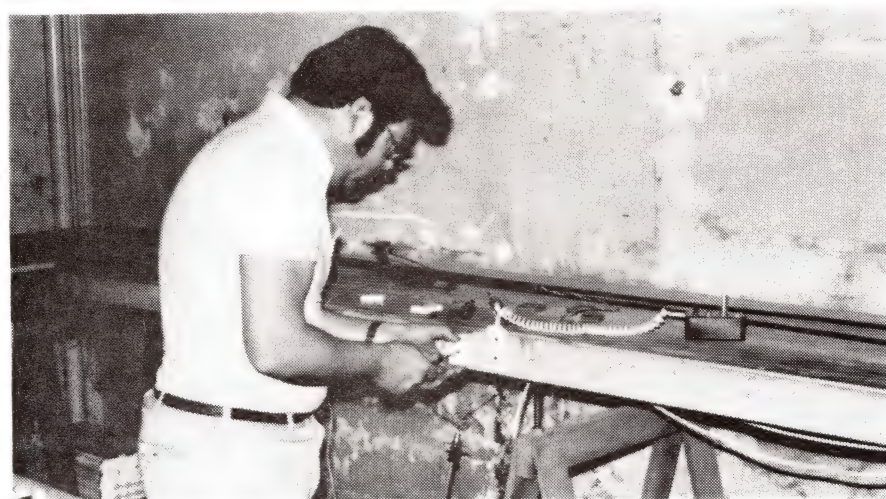
During the final packing up, a short shower catches members chatting under the activities' tarp.



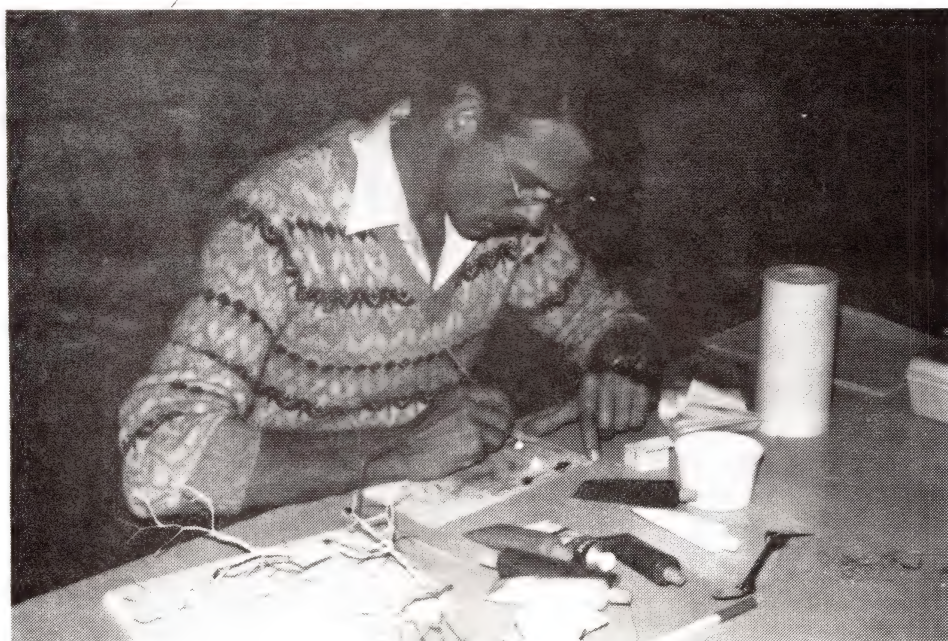
An unusual train for this area was the ARHS special to Casino. Many AMRA members were on board.



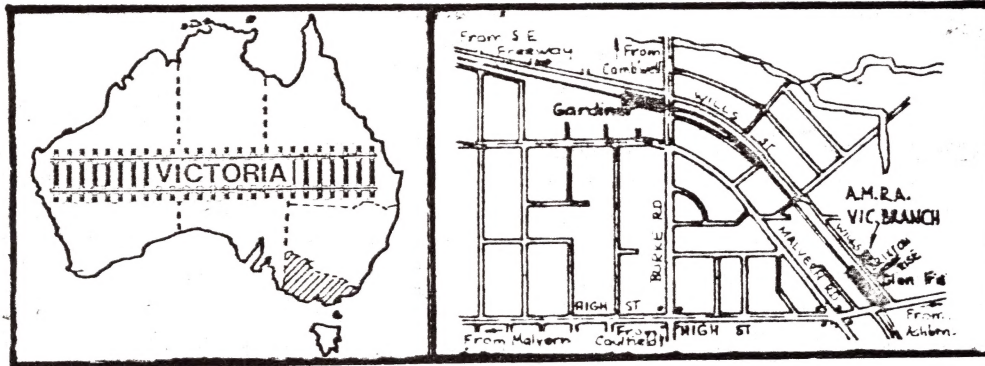
1 The last 'Daytime' Southbound Brisbane Limited passes through the Border Loop area. In the centre of this photo is the town of Cougal and the hill over it is the Border Loop.



Vice President Jess does some electrical work on the Clubroom layout system.



Country member Al Morgan details some trees at the Clubrooms.



PRESIDENT'S MESSAGE

At the December General Meeting it was my pleasure to present two awards to Victorian members.

The first, on behalf of the Federal Committee, was a Meritorious Award to Gordon Duncan. Gordon's efforts on behalf of Journal should be well known to readers of these pages, but he has also given sterling service to the Victorian Branch since he joined early in 1976.

He was the prime mover with regard to the Branch 'MODRAIL' exhibition layout project, constructed all the modular baseboards and leg frames, plus the complete station module and buildings, with only minor assistance from a couple of members, the main control panels, power pack and three controllers.

Gordon has also constructed the Exhibition competition showcases, 'Willsland' counter, key cabinet, storage case for exterior sign plates, display case for the Library, frames for the overhead driver's panel, fitted out the 'Print Room' and various other bits and pieces. He has also recently donated to the Club layout a scratchbuilt coaling tower, water tower, a turntable, an office and store complex and a number of trees. In addition, he is currently Project Manager for the proposed new Storage Building.

The second award, the "President's Award" for 1983, was to Arthur Jenkinson, who served on the Exhibition Committee for several years and has saved the Branch considerable expense in undertaking various 240 volt electric wiring projects round the premises; the most recent of which was in connection with the installation of the gas heaters.

Our November 'Operating Day' featured Australian prototype for the first time and was very successful - more 'Australian' days are planned for the future. I was very disappointed with the response to our 'Scenery Month'.

Some progress has been made however - Pantlin township is now starting to look like one, and here I must thank Keith Wilcox who originally made the suggestion of locating a 'township' here when he visited us some 12 months ago.

Response to requests for trees was more gratifying, and many have now been 'planted', and the central 'mountain area' has, at last, sprouted some 'grass'.

In case anyone is interested, I experimented with 'zip texturing' for the first time (for me),

using plaster, 'Tempera' colour (dry powder water-colour), some others that resembled coloured grout, sawdust, acrylic paint, together with a coarse and fine sieve and a water spray.

The plaster base was first painted with acrylic (house) paint, allowed to dry, diluted white glue brushed on and sawdust sprinkled over with the coarse sieve.

Dry plaster and the dry powder colours were then mixed to give several batches of different greens and yellows, a fine spray of water applied to the sawdust-covered base and the plaster mixes dusted on through the very fine sieve. Colours were blended in with the aid of the water spray.

This coloured plaster over the sawdust has really brought this area to life - but much more still remains to be done.

There has been a minor landslide on one side of the mountain where Ray (Barney) Brownbill is preparing to construct a stone viaduct - we can't wait to see it!

On a personal note, somehow, in between general club and committee duties, I've even managed to do a little modelling for myself, having redrawn, to HO scale, details of a standard NSW coal bunker and actually started the construction of the model! This will be the subject of a future article for Journal.

Roger Lloyd

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GENERAL NEWS

The November meeting proved an 'eye opener' to many of us - we were treated to a practical demonstration of the uses of the 'Dremel MotoTool' and accessories, presented by Barry Black.

Some of you may have met Barry in various stores around town where other capabilities of the 'Dremel' tool have been demonstrated - I can see quite a few applications round my neck of the woods!

The 'Gossip Department' has a few items this time: Romance must be in the air - Arthur Jenkinson's son, Peter, has become engaged to member Carol Stuchberry, Manfred Ebinger has become engaged and Graham Stockfeld has bin and gone and got married. Our felicitations to them all. (Never quite sure whether to congratulate the girl or the feller - so that takes care of that issue!) Maybe the future of the Branch could be in good hands?

The December meeting brought a showing of

slides taken during the recent excursion to Britain and the Continent by several of our members.

Thanks to Graham Nitz for the presentation and the commentary.

The Howard Armstrong Trophy for a scratchbuilt model went to Gordon Duncan for his water tower (now on the Club layout). It must have been his lucky night - two awards in one night!

The November photographic competition subject was a prototype signal box, and honours for both print and slide section went to Geoff Brown.

RE M I N D E R S :

- 1 Operating Days are on the First Sunday in the month.
Running Days are on the Last Sunday in the month.
- 2 Annual 'Open Day' and BBQ on Sunday, 19 February 1984 - bring yourself, your meat and your train and enjoy the company, the eating and the running.
- 3 Exhibition time approaches again!! If you haven't already offered your services (and the list was very short the last time I saw it), NOW IS THE TIME! Remember, help is needed to 'set up' on the Thursday and dismantle on the Monday night, as well as 'in between' to run the show.

Ron Thomas

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AGENDA

JANUARY

- 12 Thur Running Night - no formal meeting
No competition

FEBRUARY

- 9 Thur Operations on Club layout
Model - Australian produced kit
Photo - prototype diesel loco
- 12 Sun Working Bee
- 19 Sun Open Day and BBQ

MARCH

- 8 Thur Set up Exhibition
- 9- Fri- Exhibition
- 12 Mon

APRIL

- 12 Thur Clinic - Demonstration of track laying and tools
Model - Open - standard categories
Photo - Model - diesel loco

MAY

- 10 Thur Film Night
COM nominations close at 9 pm
Model - Australian produced kit
Photo - prototype pointwork
- 13 Sun Working Bee

JUNE

- 14 Thur Annual General Meeting
Presentation of Awards
Model - Open - standard categories
Photo - model pointwork

JULY

- 12 Thur Annual Auction
Model - Australian produced kit
Photo - prototype signal

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LIBRARY NEWS

Mainly 'how-to-do-it' books this time, and just as well you may say. Really, there aren't as many books published on model railways as you might think, and even fewer that are really good. Still, I know that I learn something from every one.

It's particularly hard to find one for the real beginner that isn't patronising, and doesn't, somewhere, make it harder than necessary, to prove how smart the author is. I think we've found a good one in Chris Ellis' Practical Model Trains (Temple Press). A good big English book, with plenty of illustrations, but without the American impression that everything can be told by them, and the words aren't really important.

Another 'practical' in Practical Electronics for Railway Modellers by Roger Amos (Patrick Stephens) and another English publication. Again directed at the novice, but I suspect of use really only to one (like myself) who knows just a little about it. At this level I think it's excellent, with beautifully clear exposition as to what's going on, and especially (with feeling) good trouble-shooting techniques for when nothing does. Some clever ideas, and some circuits which look complicated, but which are neatly broken down into their component bits, very neatly. He stops short, very deliberately, of 'chips' so advanced electronic buffs will have to find another book.

We don't have much on the really practical, down-to-earth stuff about how to handle tools and work materials. A member has brought to my attention a really excellent set of introductory booklets produced by the Department of Labour and Immigration for apprentices in metal working. I'll list them here and hope that someone with more skill than myself will give them a proper review in a future issue:

- . Introduction to Metal Working
- . Hand Tools
- . Measuring, Testing and Marking
- . Limit Systems, Tolerances and Fits
- . Filing
- . Scraping
- . Offhand Grinding
- . Hand Tapping and Thread Cutting
- . Basic Fitting Projects
- . Workshop Safety

Having absorbed all that, you'll be well on the way to coping with Martin Evans' The Model Steam Locomotive (Argus Books), with the subtitle - A Complete Treatise on Design and Construction. It is an update of his Manual of Model Steam Locomotive Construction published in 1959. This one is really for the engineers, and provides information, diagrams, mathematics, everything for the designer, as well as the constructor of model steam.

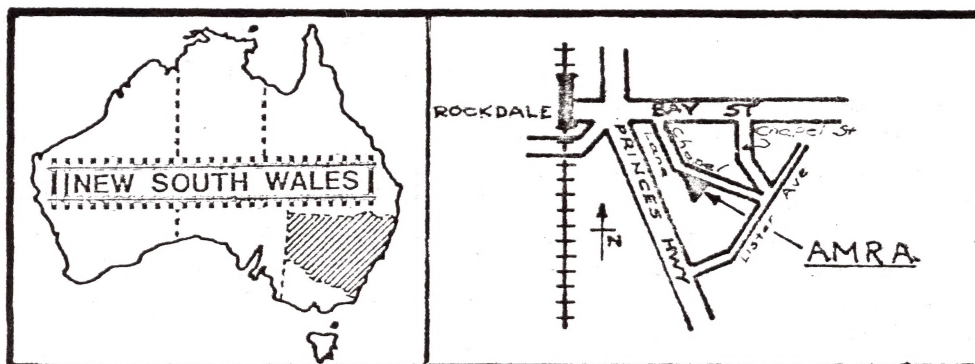
After all that, we haven't really neglected the prototype: List of Locomotives Built by the Victorian Railways by Peter Medlin (Platina Publications) is just that. Mile End's Steam Finale by Kenn Pearce, is another of Railmac's booklets (what, only one this issue?). A pleasant mixture of data about the locos that passed through Mile End in the 10 years before 1967, anecdotes and general information about life as a railway worker at the time.

Robin Bromby's The Country Railway in Australia (Cromarty Press) should have been a pot-boiler,

one would think from the title (apart from the metropolitan lines, surely all Australian railways are country railways), but in fact it's a nice little collection of information about various lines, various stations and events. Particularly useful for the dozens of historical photographs, none of which I'd seen before.

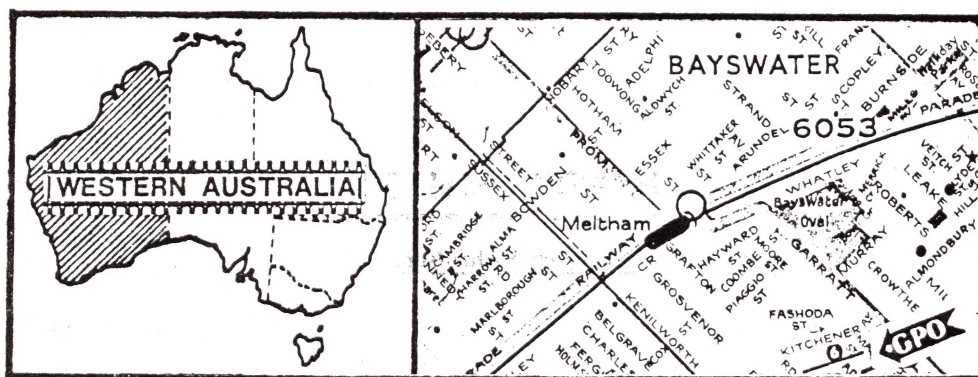
Happy New Year!

Brian Southwell
Librarian



"GONE FISHING" ?

RESULTS NEXT JOURNAL ?



TIMES OF MEETINGS ARE AS FOLLOWS:

Mondays and Wednesdays - 8 pm

Saturdays - 2 pm

The rooms will be open at least 15 minutes prior to the starting time.

All meetings will be held at the Clubrooms, upon Meltham Station, unless otherwise stated.

Interstate visitors are most welcome. If you are in Perth for any reason, would like to visit, but cannot attend a programmed meeting, please contact our Secretary, John Martin, on 447 5490.

Details of activities up to the end of February 1984 are as shown in Journal 157. For any alterations, check your next 'Branchline'.

HAVE YOU SEEN?

Model Railway Constructor for September.
Datafile articles on Great Eastern Railway Cattle Box and Lynton and Barnstaple coaches.

Scale Trains for August. More modifications to the Hornby 9F. Building a GWR steam railcar from an Airfix auto trailer and Hornby 0-4-0. Part 4 of the 'Toad' story. Modelling French railways is covered by Andy Hart of the SNCF Society. Coombe Junction - a small prototype junction very suitable for a minimum space layout, includes track diagrams and prototype photographs. Converting a Bachmann HO trolley car into a British tram in OO.

Scale Trains for September. More on the SD40-2, both prototype and detailing the Athearn model. Part 3 on the Greenbrier line is worth studying if you're having problems with your wiring, a simplified schematic diagram shows you how.

Building a GWR 3150 class 2-6-2T from the Airfix models of the 61XX and City of Truro kits. An article on constructing an oil depot is useful for the detailed building construction techniques described, both with words and diagrams. 'Focus' on the British Rail Intercity 125 high speed trains, followed by an article on detailing, etc, the Hornby and Lima models detailing the Mehano model of the Alco S2 switchers.

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Scale Trains for October. The 'Toads' Part 5. Scratchbuilding a 'Morel'. Modelling the Athearn 'SP Trainmaster' in HO, prototype photos, details, etc, and detailing the model. 'Focus' article on the GWR 93XX class 2-6-0, followed by an article on detailing and converting the Mainline model to 43XX/73XX/93XX variations. Detailing the Mainline 03. Basic techniques for model railway photography.

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Model Trains for July. Part 3 of the Mamodifications series, radio controlled live steam. Jack Wheldon reviews the Loxley live steam models Lady Anne and Dylan. Tramway permanent way and overhead equipment in 4 mm scale, how to make it. Detailing the K's General Utility Van kit. Prototype photographs of the Class 20.

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Model Trains for September. Another live steam review by Jack Wheldon. The Merlin models gas-fired Sierra Leone Railways Hunslet 2-6-2T. Building the DJH kit of the Maunsell E1. Chassis building in N and OO9. Mamodifications Part 5.

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Model Railways for October. Part 2 of Calver, making the buildings, road and rocks. The Scale-four Society in detail. Part 2 of the Novice Scratchbuilders. Detailing the Hornby 'Schools'. Part 2 on the Long Boilered 0-6-0s of the S&D.

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Railway Modeller for October. Converting the Lima 4575 to a 45XX, plus all its usual articles.

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MOTORS

The Portescap RG4/1219 motor/gearbox unit is reviewed on page 549 of the Model Railway constructor, September issue - well worth reading.

APOLOGY

Report on the MODELRAIL CONVENTION '83 and John White's article on his 'LINDES FARNE' layout will appear in Journal 159 as, unfortunately, copy was received too late to have the necessary photographs processed in time, due to the Christmas holiday period.

Managing Editor

HANDY HINTS

C. E. (Rick) Richardson.

You are building an all-metal model, and there are places in and on it which require purposely built-up areas of soft solder to be filed to shape (e.g. the top corners of a belpaire firebox, the flared skirt at the base of a locomotive smokestack or domes, or perhaps the removal of flash on soft-metal purchased parts). You start to work, and before long the file teeth are clogged with an immovable mass of soft metal - and files are now expensive tools. Before using a file on soft metal, always wipe both sides generously with a stick of ordinary chalk-board chalk. Any soft metal fragments which cling in the teeth will now easily flick away if prodded with the point of an engineer's scriber or similar tool.

There is a soldered joint to make, and because it won't be possible to later reach the seam to scrape away excess solder, you only want that solder right in the joint - and nowhere else! With a sharp blade, pare tiny crumb-like fragments from the wire or stick solder in use. Apply flux to the joint, then with the aid of tweezers, arrange these little solder grains along the length of the joint at about 6 mm spacing. Apply the hot soldering bit to the metal near, but not actually on, the joint. As the transmitted heat reaches the solder, each tiny fragment will melt and run into the seam in much the same manner that ACC cement flashes along a seam. Result - a perfect soldered joint, with absolutely no subsequent clean-up required.
